Bell Telephone MAGAZINE

WINTER 1958-59

The Business Voice of the Company—The Service Representative

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Bell Telephone Magazine

A non-technical review, published quarterly to give Bell System management people a broader view of the history, objectives, operations, and achievements of this business than they might attain in the course of their day-to-day occupations, and an added sense of participation in the problems and accomplishments of our nation-wide public service.

COVER: "The Business Voice of the Company—The Service Representative." Painted for this Magazine by *John Gaydos*

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A MEDIUM OF SUGGESTION and A RECORD OF PROGRESS

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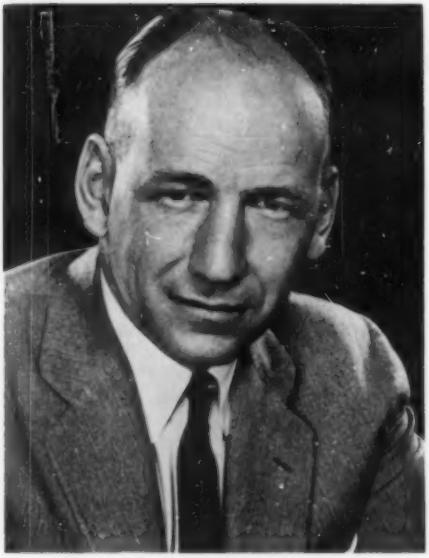
Who's Who & What's What In This Issue



Clifton W. Phalen

CLIFTON W. PHALEN was elected Executive Vice President, American Telephone and Telegraph Company, on March 1, 1956. He had been president of the Michigan Bell Telephone Company in Detroit since September 1, 1952. Mr. Phalen joined the New York Telephone Company as a lineman in 1928, and within the next ten years he had progressed through that company's Plant Department to become division construction superintendent in the same division in 1939; in 1943 he was appointed assistant vice president, Personnel, and in 1944 vice president; his transfer to vice president of the New York Company's Public Relations Department in 1945 preceded by three years his election to similar office in the A. T. & T. Company. In 1950 he was appointed vice president, Administration-R Department, and in 1951 vice president, Personnel Relations, A. T. & T. Mr. Phalen's present article is his third contribution to this MAGAZINE. His first article, "How Western Electric Serves Telephone Users," appeared in the Autumn 1948 issue; and his second one, "The Kind of Service our Customers Want," was published in Autumn 1950.

THE PRESENT ARTICLE on share owner relations is S. WHITNEY LANDON'S second contribution on that subject in this MAGAZINE. His first, "Earning the Friendship of the Owners of A. T. & T.," appeared in the Spring 1955 issue. Mr. Landon was elected

S. Whitney Landon

Secretary of the American Telephone and Telegraph Company in 1952 and at the same time appointed Assistant to President. Three years with the Western Electric Company, 1923-26, preceded an eight-year period as a practicing lawyer in New York City. In 1934 Mr. Landon returned to the Bell System as an attorney in the Legal Department of A. T. & T.; in 1937 he became general attorney of the Long Lines Department, remaining there until 1951. In that year he transferred to the Secretary's Department at A. T. & T. as assistant vice president and assistant secretary, prior to his present post.

Carroll R. Daugherty

SINCE HIS ELECTION as president of A. T. & T. on September 1, 1956, FREDERICK R. KAPPEL has been represented in several issues of this MAGAZINE, through publication of the text of a number of his talks. Most recently, his "The Will to Work Together" appeared in Autumn 1958. Here was given also an account of his Bell System career, beginning with his employment in the Plant Department of the Northwestern Bell Telephone Company in 1924 and leading, through varied assignments, to the post in 1942 of vice president of operations and a directorship of that company. Subsequent changes saw him as head of the Long Lines Department, as vice president of A. T. & T.'s Department of Operation and Engineering, and — in 1954 — as president of Western Electric. A photograph of Mr. Kappel is shown on page 10.

Melvin Anshen

AS AN OUTSIDE CONSULTANT and discussion leader, MELVIN ANSHEN has been associated with the Bell System Executive Conference since the days of its planning and early operation in 1953—which were described in this MAGAZINE for Spring 1954. In the Spring 1956 issue he contributed an article on the establishment of the *Advanced* curriculum. His article in the present issue is concerned with the third development—the Senior Bell System Executive Conference. Currently on the fac-

(Continued on page 60)

A farmer share owner discusses his stake in the telephone business with a district plant superintendent. See the article beginning on page 9.

Telephone service is the only household utility service that is subject to a Federal excise tax. This is not consistent with fairness or sound taxing policy

"THE MOST DISCRIMINATORY TAX LEFT . . ."

CLIFTON W. PHALEN

Executive Vice President, AMERICAN TELEPHONE AND TELEGRAPH COMPANY

ONE OF THE important matters the new Congress will face is the Federal excise tax on telephone customers. This is a tax that more than 45,000,000 telephone customers pay every month. This is the "temporary emergency tax" that last year took $700,000,000 from the pockets of these customers. The major share of the money comes from the tax on local telephone service—a holdover from World War II—which Representative Wilbur Mills (Dem.-Ark.), chairman of the House Ways and Means Committee, called "the most discriminatory tax that we have left in the field of excises."

This Congress probably will have to decide whether to look toward repeal of this "temporary" tax or take action which could make it a permanent part of the tax structure. Here's why:

The Joint Federal-State Action Committee has recommended that Congress turn over a part of the excise tax on local telephone service to the states. This money would be spent for waste treatment projects and vocational education—programs now supported by Federal grants to the states.

Specifically, the Federal Government under this plan would give up 30 per cent (3 percentage points) of the present 10 per cent Federal tax on local service. An additional 10 per cent (1 percentage point) would be distributed by the Government to those states collecting insufficient money to pay for the programs. At the end of a five-year transition period, the Federal rate would drop to 6 per cent, the present Federal grants would stop, and state taxes would have to bear the entire burden of supporting the sewage treatment and vocational training programs.

If this happens, the excise tax, which was originally enacted strictly as a temporary emergency measure, may well become permanently riveted to the tax structure. The fact that such a proposal was made at all makes it clear that some government officials consider the excise tax a permanent part of the tax scene. Actually it never was intended as such and it should not become permanent.

As a matter of fact, telephone customers would be faced not only with a permanent tax but, in many states, with a much higher one. This is because a local 4 per cent tax (3 plus 1) levied in those states wouldn't cover the cost of the programs after the Federal grants stop. Some 30 states, in fact, eventually would have to consider a larger tax than the 4 per cent abandoned by the Federal Government, in order to produce the same money they had been getting from Uncle Sam. Estimates indicate the levy might have to go as high as 18 per cent in some states. And this, of course, would be in addition to the 6 per cent Federal tax which the Government proposes to retain!

FROM THE BEGINNING, two avenues were open to us. We could have sat on our hands, so to speak, and done nothing to oppose the tax—it was levied on our customers, not on the company. Or we could speak out against the tax because it is unfair and discriminatory.

We chose the latter course, and back in 1947 Bell System representatives began a series of appearances before Congressional committees in Washington. Each of our people has urged prompt elimination of the tax as soon as Government revenue requirements would permit. We recognize the Government's need for tax money to meet its huge expenses. Yet we feel strongly that when the opportunity allows, the telephone excise tax is one levy that should be removed. To regard it as proper for the long run is unthinkable.

There is neither rhyme nor reason for the telephone excise tax today. Historically it has never been imposed on the American public except in times of emergency. During the First World War and the Depression of the Thirties, the rate was relatively light. The heavy tax came in World War II. It had three objectives: to raise money for the war effort, to discourage growth in telephones, and to discourage the use of circuits needed to carry on the war. But the conflict has been over now for 13 years, and the original purpose of the tax has long since disappeared.

Moreover, the excise tax on telephone service is unfair and discriminatory. Telephone service is an everyday necessity for nearly everyone; yet it is the only household utility service that is subject to a Federal excise tax. Congress removed the excise tax on electricity in 1951. Gas and water services have never been so taxed.

The levy on telephone service—an essential household and business service—is just as high as the one on furs, jewelry, cosmetics, and cameras. Only things like club dues, cabaret checks, liquor, and tobacco bear a higher tax.

The telephone customer carries a heavy burden of telephone taxes, even without the excise tax. In 1958, the average Bell System customer paid $41 in corporate telephone taxes. And Uncle Sam tacked on some more—well over $15 in excise taxes.

TELEPHONE PEOPLE are not concerned here with what functions the Federal Government might wish to transfer to the state governments. However, we do think it unsound to base such a transfer on the shaky foundation of a tax that is discriminatory and should be eliminated. Furthermore, we do not believe that taxing telephone service alone to pay for sewage disposal and vocational training can be justified.

Local water and waste treatment projects have traditionally been financed by local bond issues, which are a charge upon the entire community, or by local taxes im-

No Road for Party Priority

Calling Washington, D. C.

Inconsistent, but

EDITORIALS

Is This Tax Just?

Editorials in the press indicate an awareness of the inequity inherent in the communications excise tax

posed directly on the users of these services. Such general welfare programs, including vocational training, should be financed by taxes levied uniformly on the general population, not just telephone users.

We are not alone in our thinking on this matter. The public service commissions—government bodies which regulate us—also oppose the excise tax as discriminatory and contrary to the best interests of the public. The National Association of Railroad and Utilities Commissioners has not only passed resolutions against the tax but has appointed a committee to work for its repeal.

The commissioners realize that we must collect from our customers $2.08 for every $1 of net income. The difference goes for Federal corporate income taxes—and on top of this, telephone users must pay an additional 21 cents in Federal excise taxes —a tax upon a tax.

WE HAVE SUPPORT, too, in Congress itself. Statements made in the House and Senate and reported in the Congressional Record indicate a strong sentiment for the elimination of communications taxes. An increasing number—32 in all—of bills demanding repeal or reduction in the communications excise tax were introduced in Congress in 1958. And last March Joseph A. Beirne, president of the Communications Workers of America, AFL-CIO, strongly recom-

mended repeal of the tax in a statement to the House Ways and Means Committee. This kind of support is welcome and gratifying.

More people in every community should be made aware of the threat of further discrimination against telephone customers posed by the Joint Federal-State Action Committee's proposal. Congressmen and other Federal and state officials should be told the story at every opportunity.

Our own employees are vitally interested in this problem.

And we believe that most of the 45,000,000 telephone customers have definite views. We are confident that many of them will make known their opinions of "the most discriminatory tax that we have left in the field of excises."

Share owner relations have a place alongside public relations and employee relations in this business

THE BELL SYSTEM'S STAKE IN GOOD SHARE OWNER RELATIONS

S. WHITNEY LANDON

Secretary, AMERICAN TELEPHONE AND TELEGRAPH COMPANY

OUR SHARE OWNERS are very important people to us. They own the Company and naturally take a real interest in how it is being run. There is a great deal about their Company that they want to know, and we make every effort to see that they are kept informed.

It is essential that our share owner relations be the best we know how to make them. We are told that they are good—and we believe this is true. However, we'd like to have them even better, and we are doing everything we can to bring this about.

Share owners are investors, and investors want and need information about a business. They need it before they become owners, as a basis for their decisions to invest their savings. After they have become share owners, they continue to need complete and candid information about the business so as to decide whether to keep their money invested in the enterprise or switch it to another which they prefer for one reason or another.

In our case, they also need information to enable them to decide whether to put more of their savings into our business when we offer them opportunities to do so. Since the end of World War II, we have made nine such offers. The importance of the decisions A. T. & T. share owners have been called upon to make becomes apparent when you consider this fact: the Bell System has raised one out of every four dollars raised through common stock issues by all American corporations in the postwar period.

Then, too, there is another compelling reason why our share owners want information about us. As share owners they feel they are a part of the business. They take a proprietary interest in what we do and what we plan to do.

But keeping our share owners informed is quite an undertaking. A. T. & T. stock

President Kappel takes the opportunity to talk with share owners at the Annual Meeting.

records include more than 1,600,000 registered share owners. By way of comparison, the corporation with the next largest stock list—General Motors—has about 700,000 share owners.

A. T. & T. share owners live in some 22,000 communities in the United States. They come from every walk of life. For example, there are about 70,000 who own one share of stock, and no individual owns more than one-thirtieth of one per cent of the outstanding shares. Some 600,000 own ten shares or less, and the average number of shares held is 43. It is estimated that one out of every forty families in America owns A. T. & T. stock.

ANOTHER WAY to think of our share owner list is that it is roughly comparable to a city about the size of Detroit—the fifth largest city in the nation. And like the population of a great city, our share owner list is constantly changing. In most years, at least two new owners are needed for a net gain of one.

To help keep our share owners informed, our regular mailings to them include the Annual Report, a Report of the Annual Meeting, a Share Owners' Quarterly with each dividend check, and a Proxy Statement—as well as a Prospectus whenever there is a new equity issue. Also, to each new share owner we mail a letter of welcome signed by our President, Mr. Kappel, and a booklet written especially for new share owners, called "A. T. & T.—Your Business."

In these communications we discuss the organization of the Bell System and im-

portant developments and aims of the business. We believe these communications are effective and we know they are appreciated by share owners because they tell us so. However, they are all in one direction—from us *to* the share owners.

Communications *from* share owners about the business and its operations, aside from the relatively few owners who drop in to see us for that purpose, have been limited to comments in letters and to discussions at share owners' meetings.

Letters from share owners and the discussions at meetings are important channels of communications, but they fall far short of providing all we feel we need. We would like our relations to be as personal as possible and the communications to be on a "back-and-forth" basis.

Letters have been of great value to us because they bring to management the thinking, opinions, questions, suggestions and criticisms—also compliments and encouragement—of share owners who are interested enough in the welfare of the business to take the time and trouble to put their thoughts on paper. All letters, except those pertaining to such matters as transfer of stock, conversion of debentures, change of address, etc., are read by Mr. Kappel. Many are discussed with other officers of the Company.

Each is answered as forthrightly and as fully as we know how. In doing so, we draw upon the knowledge and experience of every department so that the replies will be accurate and authentic in every regard.

Letters, then, are of great importance and they take on something of the personal and two-way characteristics we want

A Bell company vice president calls on a midwestern bank official who acts as a trustee for a substantial number of A.T.&T. shares. It is estimated that more than 50,000 A.T.&T. share owners have their shares registered in the names of nominees of banks and trust companies.

to achieve in our share owner relations. But they are not as personal and satisfying as face-to-face discussions, and they are few in number when compared with our total share owner list.

In share owners' meetings, to a degree, we achieve personal and two-way relations. Mr. Kappel talks with those who attend and some present their views to him. Mr. Kappel hears at first hand and in their own words their opinions, questions, suggestions and criticisms. In turn, he is able to give them information about the business directly.

Important as they are as channels of communications, letters and share owners' meetings are not an adequate answer to the problem. As we thought about it, we were convinced that both our share owners and management would benefit if we could find ways to extend personal and back-and-forth communications between the two, wherever they are, from one end of the country to the other; further, that it was our responsibility to work out a means for doing this.

We made a start some four years ago and we made it in two ways. First, we began holding open-house nights for share owners in various communities. For many years we have been inviting the public into our buildings to get a first-hand view of our operations. But the idea of having open-house nights exclusively for share owners was a new thought. Second, we began a plan for visiting more share owners in their homes and offices.

Generally, open houses for the public are timed to coincide with the opening of new buildings or the inauguration of a new type of telephone service in a given community. It occurred to us that when

Visits with share owners take place where we find them. A share owner interrupts her leaf-raking when an assistant treasurer of an Associated Bell company comes calling.

A chief operator takes leave of a new owner-friend with whom she has just spent a pleasant half hour.

such open houses are planned, one or more nights might be set aside for share owners. By special invitation, they could be invited to attend, meet and talk with telephone people, and see at work the equipment their investment dollars had purchased.

A few open-house nights for share owners have been held in various parts of the country. In those trials share owners accepted our invitations in large numbers. They listened with interest to what we had to say and asked for further information about the operations and practices of the local company and the Bell System. As a result, special exhibits pointed to share owners' interests have been made available.

Plans for more of these open-house nights are being made. They achieve the ends we are seeking. They put communications between share owners and management at the community level on a two-way, personal basis. But here again they are comparatively few in number.

Also about four years ago we began a plan for greatly increasing the number of visits with individual share owners. Over the years, when questions of special importance have been raised by share owners, it has been our practice for officers of A. T. & T. and of the operating companies of the Bell System to call on them. These visits proved to be most worth while from the point of view of both parties. Also,

Adequate training is the core of a successful plan of visits with share owners. In small groups like this, management people acquire understanding of the business.

they brought home to us forcefully that personal, face-to-face discussions are superior in every way to exchanges of letters. So it was decided to ask more management people throughout the country to make calls on share owners.

IN THIS, as in every other phase of management, adequate training is essential to success. As has been stated, share owners have a wide range of interest in the affairs of the Company, and interviewers must be prepared to discuss these intelligently and fully. Representing the corporation with its share owners is a management function of the highest order. Enough time must be allowed at the training table for full discussion so that interviewers will acquire a complete understanding. In this way, operating people gain the confidence that comes from knowing they are fully prepared to discuss the business face-to-face with its owners. The material used in this training has been carefully prepared and is extensive, and in many cases covers subjects which are new to prospective interviewers.

To date, more than 7,000 management men and women have been trained, and they have made more than 100,000 visits. For want of a better term, we call the men and women who make the visits "Interviewers," but that is misleading. We do not interview—we visit.

The visits are in no sense a survey, and the interviewers do not ask questions. They are there for neighborly discussions of the business. We want to talk about any subjects pertaining to the business raised by

A district plant manager gets the views of a couple of long-time owners in a Southern state.

share owners. We are interested in their top-of-the-mind thoughts and opinions. We welcome their suggestions and criticisms. We want to answer their questions. We want to give them the facts they ask for. When interviewers are unable fully to answer share owners' questions, they do not hesitate to say so, then get the facts and report back to the share owners.

In the process, we find opportunities to clear up misunderstandings and misconceptions about us. Above all, we establish communications on the personal and back-and-forth basis we want so sincerely.

The names of share owners to be visited are selected on a random basis without regard to size of holdings. The visits are made by people from most management levels of all departments of A. T. & T. and the Associated Companies.

What takes place during the visits? Well, on a recent day—

— In a Western state, a commercial manager talked with a share owner who interrupted his farming chores to ask whether the Bell System was doing its part in national defense.

— In a Southern state, a district engineer visited a woman share owner. She had wanted for some time to change the registration of her shares to include her daughter as joint owner. "How do I go about it?" she wanted to know.

— In a Midwest state, an assistant treasurer called on the senior trust officer of a bank in whose name as trustee a substantial number of A. T. & T. shares were registered. One of the banker's questions was, "Are you fully convinced your debt ratio is sound?"

– In the Southwest, an accounting manager called on a husband and wife, joint owners of A. T. & T. stock. They wanted to talk about current newspaper articles which they thought misrepresented the efforts of the local Bell operating company to secure adequate rates. "Is it true that in recent years the cost of telephone service has gone up much less than other living essentials, or isn't it? What are the facts?"

– In an Eastern state, a chief operator dropped in to visit with a woman share owner. The owner wanted to know: "How much is the Bell System spending on research? Are you reasonably sure that the money will benefit the business and the share owners?"

In each case, the share owner got the facts.

THOSE ARE, of course, only a few of the visits made on that day and only a few of the questions asked. Share owners also want to know about Bell System growth, about Direct Distance Dialing, about our earnings, about excise taxes, our progress in merchandising, the relationship of the telephone companies that serve them to their ownership of A. T. & T. stock. They have innumerable questions about Bell System financing—about debentures and rights. The list could go on almost indefinitely.

NOW, WHAT ARE the benefits of these visits?

In the beginning we had thought that some share owners might object to our visits for one reason or another. But with very few exceptions share owners tell us that they enjoy and appreciate them. They are pleased to be recognized as individuals —pleased to have their views sought. Those who have problems tell us about them, which gives us opportunities to help them.

Understanding is a two-way street. Our management callers also learn about the business of share owners. This share owner in the Southwest followed up a discussion of his ownership in A.T.&T. by acquainting the telephone plant personnel supervisor with the fine points of Indian blankets, a featured item in his Indian trading post business.

Interviewers accommodate themselves to the convenience of our share owners. The local public telephone manager made an evening visit with this couple so that Mr. Share Owner, who helps make automobiles during the day, could join in the discussion.

To date, in one out of every four calls, we have helped share owners in matters pertaining either to their ownership of A. T. & T. stock or their telephone service. With those who have been puzzled by something we have done or said, we get chances to explain—and in ordinary, everyday language. We can be sure we are understood.

DOES MANAGEMENT benefit from the visits? Yes. From the reports of visits, we have a whole new picture of what our share owners are thinking about, their likes and dislikes, their needs and desires for information. We begin to see ourselves as our share owners see us. The corporate image they hold of us begins to come into focus. Their expectations become clearer.

Reports of the visits provide a continuous flow of information of special interest and value to top management throughout the Bell System. Opinions of share owners can be watched and studied. The presence or absence of marked changes in their thinking is meaningful.

Are there other benefits? Yes—to the people who make the visits. These management people tell us that the special training they receive is of great value to them. They say it gives them a more complete picture of the business. Then, the experience of discussing the business face-to-face with its share owners drives home the information absorbed in training—puts understanding and conviction into their personal beliefs. Many say that they get a new sense of personal responsibility for the long-range goals of the business, and carry this back with them to their everyday jobs.

All this strengthens the management of the business.

When people are informed and, from experience, have gained confidence in their ability to discuss the business, their influence spreads. We find that after the training is completed and a few calls have been

made, our management people like to discuss the business with their friends and neighbors and others with whom they come in contact. A person likes to do and finds opportunities to do the things he or she does well.

Are the best possible relations with share owners worth striving for? They certainly are.

First of all, share owners are an essential part of the Company—they are the owners. It is important that they not only be satisfied with the Company but that they be proud of it; that they be friendly and loyal; and that they continue to help meet the needs of the business for capital. Good share owner relations further all those objectives.

Just as fans at a baseball game favor the home team and want to see it win, so share owners take interest and pride in the business in which their money is invested and want to see it prosper. As a group they know more about the corporation than does the general public. From knowledge comes understanding. And from understanding comes coöperation. The telephone business needs both understanding and cooperation—as much of these as it can get.

With their greater knowledge, better understanding, and their will to coöperate, share owners set favorable climates for the constant changes which must take place as we meet our communications responsibilities to the nation. We are glad that we have over 1,600,000 share owners, and we would like many more. The broadest possible base of share ownership is good for the Company from every point of view.

The plan to visit increasing numbers of our share owners is still in its early stages. We have much to learn about it. We have much to learn from it. It is geared for the long pull, and we will continue to benefit from it about in ratio to the vigor with which we pursue it.

Of these things we are convinced:

- The Bell System has a big stake in good share owner relations.
- Share owner relations have a place alongside public relations and employee relations in this business.
- The more we can bring about two-way and personal communications between management people and our share owners, the stronger our share owner relations will be.

A talk before
The Bond Club of New York
on November 20, 1958

PRIVATE ENTERPRISE AND PUBLIC AFFAIRS

FREDERICK R. KAPPEL

President, AMERICAN TELEPHONE AND TELEGRAPH COMPANY

I AM GLAD TO REPORT, naturally, that our business is on the way up. A year ago at this time our rate of growth was falling off, and last winter and spring we were adding telephones at a rate about 40 per cent below 1957. Then things began to improve during the summer, and since August we have been running ahead of a year ago. Taking 1958 as a whole, we shall probably gain close to two and a half million telephones, compared with 2,800,000 in '57. Long distance conversations this year will run about five per cent ahead of last.

In 1959 we hope and expect to increase these figures considerably. We doubt that our growth next year will break any records. However, we do look for a real rise in the public's wants for communication service and we are well prepared to handle this. For the fourth consecutive year, our construction expenditures to enlarge and modernize telephone facilities will exceed two billion dollars.

I said we are well prepared. One reason for this is that we did not cut our 1958 construction program to the bone when our rate of growth, as I mentioned, began to slip off. We made some reduction, yes, in the amount budgeted to take care of future expansion. I think prudent judgment required this. However, we did feel sure that renewed growth *was* coming a bit later on. So instead of cutting down drastically—which would only mean having to race the motor later in order to catch up—we went ahead with our financing and proceeded to build quite a lot of useful margin into our plant. Moreover, we kept virtually unchanged that portion of our total expenditures which was budgeted for modernizing our plant—I mean, for installing new dial systems and other equipment which makes telephone service more efficient and also more attractive to our customers.

Let me make a little comment here. I don't think we could have gone ahead with our 1958 construction as we did, if we had not been able in the last few years to improve our earnings and strengthen our financial position. I've said this before but I want to repeat it now because I hope the point will not go unnoticed. The plain fact is, we could do what was right for the long run because we were better able to afford

it. And I'd like to point out, too, that in the process we have been able to keep telephone employment at a higher level than would have been possible otherwise.

So often, people who are interested mainly in the labor side of the business picture will argue that improvement in profit is made at labor's expense. But the point here is that our somewhat better financial situation—which made it possible to carry on a better than two-billion-dollar construction program notwithstanding the recession—has been much to the benefit of employees as well as to the rest of the community.

I don't mean we have been running a "make-work" program. We have not. We need everything we have built. However, our ability to continue building in orderly fashion, at a time when our rate of growth was going down, has kept a great many people usefully at work. So you see—and I believe labor leaders and our representatives in government will also see—that profit serves the public good in more ways than one.

THIS LEADS ME into stating briefly what I think are some of the most important factors bearing on the economic health of the country and the welfare of everybody in it.

The first is that any business must have the freedom to make itself financially strong if its products and services meet the test of competition in the market.

The second is that we must not and cannot let up in our efforts to bring about *real* gains in productivity. (I say "real gains" for a reason I'll explain in a moment.) In the years ahead we shall have a rising population, more young people and older people, and a relatively smaller working force. So if we fail to be more productive, our standards of living will surely go down.

This means in my judgment that industry has a very real need to increase its research and development work, including basic research. We need to invent, develop, and design new and more efficient products and services. We need better plants, methods, and systems to produce them. Incidentally, I might mention that in 1959, at Bell Telephone Laboratories, we expect to be carrying on the largest research and development program we have ever undertaken.

Now let me explain why I spoke of "real gains" in productivity. I did so because it seems to me there is a tendency nowadays to rack up estimates of increased productivity without counting in all the costs of production. The costs that get left out are the added capital costs as investment increases. To my mind all the charts, graphs, estimates, and forecasts that leave these out are just so many statistical fantasies.

This bears directly on my third point—namely, that the continuous hiking of wages beyond real gains in productivity is sure to intensify inflation. As industry makes such gains, everyone ought to share the benefits. However, if wage increases absorb them all, and more besides, not only is sharing impossible—we are living beyond our means and in the long run no one will benefit. In my judgment also, the practice of guaranteeing additional wages in future years tends to increase the danger even further.

Fourth on my list, we have this tremendous pressure for government spending; and at the same time, a disposition on the part of many people in government to put more and more restrictions on business. There may be better ways than this to commit fiscal suicide, but if there are I haven't heard about them. Added restrictions only make it harder for business to do what it ought to be doing—that is—take more risks, sell more goods, and produce

the earnings without which the tax collector can never find the money to pay the government's bills.

As I READ the news, the impulse or drift or drive—whatever you want to call it—toward more government spending now seems stronger than ever. This disturbs me not a little, and I notice it also disturbs quite a few members of Congress itself. In these circumstances the eventual danger seems to me to lie in the establishment of wage-price controls. I think such controls in peace-time would mean the end, at least to a large extent, of what we call our free enterprise system. And I believe we must find a way to bring the American people face to face with the question—is this what they want?

As I remember, it was Mark Twain who said that everybody talked about the weather but nobody ever did anything about it. Nowadays everybody talks about inflation, but few of the efforts to do something about it have had conspicuous success. Ideally, if inequities in taxation were eliminated or minimized, the over-all tax burden on business reduced, and individual incentives restored, I think gains in productivity would accelerate, we would have much less inflation of prices, real wages would increase, business would do more business, and government revenues would be greater.

Maybe not every economist would agree with that statement, but I know some who do, because I asked them to read it before I said it and they gave me a green light. Moreover, my observation is that government is just full of able, hard-working, and reasonable men who have much the same fundamental thoughts. As a practical matter, however, circumstances press them

hard. They must read the wishes and attitudes of their constituents—which they are in no position to ignore. It is difficult for them to act always as they would most deeply and personally desire. And I think we in business have added to their difficulties by failing to expose ourselves, our ideas, and the facts at our command in ways that win widespread belief.

ALL OF US hear more and more these days that business should throw off past restraints and "get into politics"—to put that phrase in quotes. It is a phrase that can be interpreted in different ways. One interpretation—and a good one—is that business men as individuals ought to be more active in public and political affairs. I'll say a word about that in a moment. First, however, let me comment briefly on another interpretation which seems to me dangerous. This is that with labor already in there pitching to get candidates nominated and elected, business—as such—had better get going and do the same.

I think this idea can do great harm. In the long run I think it would fail even if it were to have some immediate success. The reason it would fail is that any time the people of this country decide that their elected representatives have been maneuvered into office by a particular group—be it organized business or organized labor—they will, and they should, vote them out. It may take a little time, but it will happen.

What, then, should we in business be doing about these things? How can we bring about better relations between ourselves and our representatives in government? What is our proper responsibility in public affairs? How shall we increase public understanding of the problems of industry, and confidence in our determination and ability to serve the public interest? Again I shall mention four points:

Number one in our business—and I would assume in any business—is that we simply must do the best possible job for the people we serve. I know that sounds obvious and I am sorry if you think I am being trite. But we can never, never forget this. In my humble opinion, it must always be the first thought in our minds.

The second point I tried to express when I was talking to a group of telephone people a couple of months ago. I said it this way:

Doing our best is not enough. We must also tell our story and tell it convincingly. We must do this in every community. We must see to it that the public really knows us, and that the public's representatives in government are directly and fully and honestly informed about what we are trying to do. If we are given treatment that we believe is wrong or shortsighted, we must say so and say why—and never stop working to get the situation corrected. When, on the other hand, regulators and legislators give us the means and encouragement to step up progress, then we must work to the limit to justify their confidence.

JUST IN PASSING, as an example of a situation that needs correcting, I might mention the federal excise tax on telephone service, which is paid directly by telephone users. This began as an emergency measure and is one of the most discriminatory of all taxes. In fact, the telephone is the only household utility that is so taxed. We realize well enough that now may not be the right time to reduce taxes. But the fact is that proposals have now been made which, if given legislative sanction, would embed telephone excise taxes *permanently* in *both* the federal and state tax structures. This would perpetuate discrimination, and

we shall oppose it by every proper means. I hope you will too.

However, I should also like to add—let us once and for all get over the habit of going to people in government when we need something, and ignoring them when we have nothing to ask for. Let's never ignore them—and I mean never. Let us rather, as their constituents, invite them on all suitable occasions to tell us what they have been doing. Let us invite them also to see what we have been doing. Let us tell them our plans, and take a sincere interest in theirs. Let us by all means increase our understanding of their problems, as we hope they will gain insight into ours.

To do this will not of itself settle anything. Nor do I think it should. But if we in business are the kind of people we ought to be, then it ought to be good for people in government to know us as we are. In addition, it ought to foster more interest in government on the part of more people in business.

THIS LAST is really my third point. You remember I said a few minutes ago that I thought business should be very wary of taking the same kind of leaps into politics that labor is taking. But I certainly did not mean that business men as citizens should lie down and play dead. On the contrary, business—and especially big business—has been criticized, and it seems to me with justice, for making it difficult for people in management to take part in public affairs. The net result, says the criticism, is that far too many of us—managers and employees alike—are politically inert: we have little or no idea of what democratic government is all about or of what the duties of citizenship are.

I am not talking about running for office and holding down a management job at the same time. Though there may be exceptional cases, generally the two do not mix. I think it might be difficult, for example, to be the mayor of a city and at the same time manager of the local telephone exchange. On the other hand, there will be situations where there is no possible conflict of interest, and one person can handle two jobs well. Circumstances alter cases. And quite apart from office-holding, I see every reason for encouraging people in business to engage in political affairs, as individual citizens, and no possible reason for discouraging it.

NOW I'LL COME to my fourth and last point. Recently in an article on foreign affairs I read this thought—that today, 80 per cent of the population of the world is having a brand new experience. For the first time in history, they are waking up to the fact that the price of rice is related to the kind of government they have.

I wonder how many men and women in American industry really understand *how* the price of rice is related to the kind of government *they* have and the kind of government they vote for.

Or to say what I mean in less figurative language—

Do they know that how well their industry can serve *their* interest depends on how well it can serve the interest of *all*?

Do they know that this depends, in turn, on the freedom their industry is given to prosper?

Do they know that a healthy *economic* climate depends on the *political* climate their votes establish?

As to any political plan or program, regardless of who proposes it, do they search out the answers to questions like these:

Will it benefit the whole community—

or just some people at the expense of others?

Is it good for the long run—or will it pile up trouble later on?

Is it sincere—or just smart politics?

I do not at all underestimate the intelligence of people in industry. I think they are well able to look at the evidence and decide.

But I think they have not always had all the evidence. In fact, sometimes the evidence about boils down to each party trying to promise more than the other. And while I am dead against corporations engaging in partisan support of candidates, I certainly think we should do the most we can—and that is more than we have been doing—to discuss policies and issues and call attention to their impact.

I hardly need to say how foolish it would be for any business to work along these lines on a merely self-serving basis. Only our own conviction that we speak the truth in the public interest will create conviction in others. But if we have this conviction, and speak that truth—voluntarily and with courage—I am confident we shall be performing a public service and that our efforts will be so recognized.

To come back, in conclusion, to the telephone, I have one more very brief comment. All the time I've been standing here, I have been conscious of facing an audience that includes quite a few of the Bell System's best and biggest customers. But whether you consider yourself a large customer or a small one, may I just say this:

We want all of you to like what you get from us. We want to make our service to you increasingly better. We shall never relax our efforts to bring that about.

I not only believe that the telephone will be more and more useful and valuable to you—I am certain that it will. And I assure you that from that result will come our greatest satisfaction.

The Senior Bell System Executive Conference still further extends the pioneering management program originally undertaken in 1953.

DEVELOPING MANAGERS FOR A DYNAMIC FUTURE

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AMONG ALL THE PROBLEMS facing managers today, none presents a greater challenge than preparing to operate successfully in a world that is experiencing a more rapid rate of change than we have ever known. What is demanded of managers in this dynamic world is the imaginative anticipation of change that permits setting objectives, developing plans, and constructing action programs that resolve problems, throw up defenses against adverse forces, and exploit opportunities as they present themselves.

This is difficult enough when the field of action is confined to economic dynamics. The challenge is even greater when changes are visualized in the character of the social and political environment in which business functions.

Developing executives to meet this challenge is a principal concern of top management. Out of the complex interaction of inherent ability, educational background, technical and skill training, job experiences, the formative influence of supervisors and associates, and formal advanced management educational programs, executives build their capabilities to handle current assignments and to direct their thinking and planning into a dynamic future. If they build poorly, their organizations move from one crisis to another. If they build well, their organizations are distinguished for continuous and adaptive growth and the transition from one management generation to the next is accomplished smoothly.

The Bell System has been among the leaders in American business in recognizing the compelling need for "growing" management for the future. In particular, it has pioneered in creating advanced management programs designed to broaden and energize the imaginative thinking of all executive personnel and to encourage managers to anticipate and prepare for the changes that present both problems and opportunities.

With the inauguration of the Basic Bell System Executive Conference in 1953, the System companies undertook the first large-scale effort by a single corporate

Group assembly.

enterprise to extend the business-oriented thinking of a complete horizontal slice of management at the department head level. In 1955, a second pioneering step was taken with the opening of the Advanced Bell System Executive Conference, designed for men who had participated in the Basic program. Now in 1958, a third pioneering step has been taken with the opening of the Senior Bell System Executive Conference, planned for department heads who have already attended the Basic and Advanced conferences, as well as for company officers and general managers.

The Associated Companies have had a direct interest and participation in the development and conduct of these conferences. A committee of vice presidents from several companies, assisted by outside consultants experienced in management development problems, was responsible for the initial planning of the Basic program. The committee, with some changes in membership, continued to provide guidance during the years in which the first projection has been broadened in concept and extended to advanced levels.

Objectives of the Basic and Advanced BSEC Programs

THE THINKING behind the development of the new Senior program can be grasped most clearly if it is reviewed against the background of the Basic and Advanced conferences.

The Basic BSEC program was designed to serve three fundamental development needs:

1. To broaden the thinking and the outlook of telephone management people at the department head level.
2. To increase their effectiveness in their present jobs.
3. To stimulate their interest in further self-development.

As noted in a review of the Basic Conference in the Spring 1956 issue of this MAGAZINE, "The acceptance of these needs . . . reflected general recognition that Bell

System executives already possessed high technical competence. Throughout the System there was agreement that the critical requirement was to open mental windows for men who had spent their business lives within the telephone industry, frequently within a single department in a single company."

From November 1953 to June 1955, more than 700 executives at the department-head level attended BSEC in groups of about 40 in each four-week program. With strong emphasis on give-and-take discussion techniques under the leadership of outside moderators, the conferees studied the behavior of the nation's economy, the handling of common management problems by companies in other industries, and broad telephone policy issues. A typical group included line and staff men from operating telephone companies in all parts of the country as well as from Bell of Canada; manufacturing, installation, and distribution managers from Western Electric; and technical and staff administrators from Bell Telephone Laboratories.

The decision to inaugurate the Advanced BSEC program reflected the belief that education is a process that never ends and the expectation that the broader thinking stimulated by the Basic course could be reinforced and made more valuable for the System if it could be brought to bear on management problems within the telephone business.

The emphasis on broader thinking was not abandoned, however, in the transition from focus on problems outside the System to focus on problems within the System. The Advanced conference was designed around a giant "case" in which participants were asked to place themselves in the position of general officers of a System telephone company. (It was created for the purpose by assembling pieces of several actual System companies into a new organization—initially known as The Median Telephone Company and later, in revised form, as The Bi-State Telephone Company.) In this setting, at the level of their bosses' jobs, conferees were faced with the necessity for appraising issues confronting

Round table discussion.

Q. E. D.

top management, determining objectives, and formulating plans and programs to achieve these objectives. As background for this assignment, the conference included special work in the use of capital; in merchandising and marketing; in labor, community, and human relations; and in management development.

Since the fall of 1955 most of the men who participated in the Basic BSEC program have also attended the two-week Advanced conference. In addition, several Basic programs have been conducted each year for men promoted to the department-head level since 1955. Recently, the Basic and Advanced programs have been consolidated in a single three-week conference for newly-appointed department heads.

Objectives of the Senior BSEC Program

THE SENIOR BSEC program inaugurated in 1958 is a third step in the planned program for comprehensive development of telephone executives. Behind the program is concern about the future of the business—particularly the longer-range future. For it is here that communication service will face new requirements and meet new opportunities, that the telephone business may have to be carried on in a different social and political environment from what we know today.

We cannot forecast the full details of that future with confidence, but we can prepare our minds for coping with dynamic change: first, by recognizing that change is inevitable; second, by exercising our imaginations so that we increase our ability to identify major possibilities in the adaptation and evolution of existing conditions; and, third, by developing added skill in setting long-term goals in this new environment, and designing plans and programs to achieve these goals.

The Senior conference has three principal objectives:

1. To encourage and help telephone executives to think more clearly about the future of the business, specifically:
   A. To recognize changes in the economic, political, and social environment, and in the scale and techniques of the internal operation of the business.
   B. To identify adaptation to and exploitation of change as management's greatest challenge and greatest opportunity in the years ahead.
2. To encourage and help telephone executives to define goals for the business that are realistic and realizable, and consistent

Attentive listeners.

with their concepts of a future that is unlike the present.

3. To encourage and help telephone executives to develop comprehensive and specific operating plans and programs designed to achieve defined goals: what to do and how to do it, starting from where we are and progressing toward the accomplishment of selected objectives within a realistic time schedule.

As this statement suggests, the Conference is entirely oriented toward the future. It rests on the assumption that the future will be different from the present in a number of important characteristics. It is directed at getting a clearer understanding of the big problems that lie ahead, selecting objectives that are essential to the continued and growing success of the business, and developing plans and action programs that will steer the business toward the accomplishment of these objectives. Conferees are asked to take a hard and detailed look at the years between 1958 and 1965 and to attempt a more general assessment of the longer outlook to 1970 and beyond. This "forward look" is brought to bear on specific management problems in the telephone business by asking the men to do their thinking in the capacity of officers and general managers of a typical Bell System Company—The Bi-State Telephone Company.

How the Senior Conference Operates

As in the Advanced BSEC program, the focus of attention in the Senior conference is at the general management level of The Bi-State Telephone Company. Conferees are placed in the position of the President's Cabinet. In this capacity, they receive from the President the assignment of taking a critical look at the Company's future prospects, problems, and opportunities—in detail to 1965 and in more general outline to 1970 and beyond. Their mission is to set objectives for the Company, develop policies and programs designed to reach those objectives, and make specific recommendations on actions that should be undertaken immediately in order to start on the accomplishment of the approved time-phased program.

The President is firm in his charge that Bi-State, whose recent and current performance places it at about average level for System companies, must develop a plan supported by action programs designed to bring it to a position of System leadership in operations within the indicated period of time.

Among the working materials turned over to them by the President, conferees receive detailed minutes of a recent meet-

Considering the problem.

ing of the Company's Board of Directors. Here a number of Board members talked frankly about their concern with the Company's performance and its readiness to cope with the challenge of a dynamic future—with its threat of continued inflation of prices and wages, its merchandising opportunities that may be seized and exploited or fumbled and lost, its changing social attitudes toward the role and responsibilities of big business, the need for better managers, and many other problems.

Other working materials include:

(1) a report of interviews with a sample of management people in both line and staff assignments, conducted by an outside firm of management consultants;

(2) statistical projections of Bi-State's operations (revenues, costs, earnings, construction program) for 1965 and 1970, assuming continued inflation in prices and wages and a moderate effort to market telephone products and services;

(3) confidential interviews with management people at all levels of the Company's organization, in which the men interviewed talk frankly about their jobs, their problems, and their accomplishments;

(4) a detailed statistical manual laying out the full story of the Company's recent operations and current status; and

(5) memoranda and studies expressing the views of headquarters staff departments and others on future prospects, problems, and opportunities in such areas as management requirements, public relations and public affairs, and management development.

What this mass of material amounts to in the aggregate is a picture, both comprehensive and detailed, of the operations of a typical System company, together with studies of the individuals who make up its management team and their attitudes toward the organization and the way it performs. For most of the conferees this probably represents a broader, deeper, more far-ranging picture of a telephone company than they have ever known. When they complete their study, they probably know much more about all aspects of Bi-State than they know about their own System companies—with the exception of the departments and staff areas

Discussion . . . consideration . . . research.

"The way I see it . . ."

in which their work assignments have placed them.

Much of the material is sent to participants in advance of their planned arrival at the conference (held in the Berkeley-Carteret Hotel, at Asbury Park, New Jersey, the scene of BSEC since its start in 1953). They are invited to start their study prior to their departure for the program. After they arrive, each group of about forty conferees, representing a diversified mixture from many companies and functions including Western Electric and the Bell Laboratories, is divided into four working parties. With BSEC staff personnel as discussion leaders, the subgroups meet repeatedly in informal sessions to talk over all aspects of Bi-State's future and to develop objectives, policies, plans, and action programs. The final two days of the two-week program are given over to several meetings of the entire group with an outside moderator acting in the capacity of consultant. At this time, ideas developed in subgroups are brought together, held up for critical review, and appraised for operational feasibility. Toward the end of the period, an effort is made to put everything together into a set of recommendations to be placed before the President.

While work on the Bi-State case claims much of the time during the two-week program, a number of other activities are going on concurrently, designed to contribute in various ways to the conferees' thinking about the future of Bi-State. Prior to their arrival at BSEC, for example, they are asked to review and make notes on (1) the important economic, social, and political changes that have occurred during their own management careers in the business; and (2) the significant changes that they think are likely to occur in the period to 1970, with some assessment of what such changes are likely to mean by way of challenges, problems, and opportunities for the Bell System.

Early in the conference, they meet with an outside moderator to review their ideas on changes, past and future. This exercise is designed to "warm up" their thinking, to start them pondering about the dynamism of our society and the challenge presented to managers by a world that is continually evolving into new forms of organization,

A quiet moment for relaxation.

new economic conditions, new technological developments, new ways of living, and new attitudes toward business.

During the program, several outside speakers—specialists in such diverse fields as population growth and movement, economic development, and public attitudes—talk to the conferees about the future as they foresee it, and stimulate discussion in which ideas are exchanged, brought under critical examination, and evaluated for their significance for telephone management in the years ahead. In addition, several cases are discussed that focus on problems in merchandising, finance, and other areas of future management concern. Some of these cases have a telephone setting; some are located in other industries.

Finally, at the end of the program, each conferee is asked to prepare a written statement of the changes he plans to introduce in the way he runs his own job as a result of his experience at Senior BSEC. This statement is for his own personal use and for evaluative conferences he may have with his boss after he returns to his home company.

Participation in the Senior BSEC program has been extended beyond the department-head group who made up the bulk of the conferees in the Basic and Advanced conferences. A special series of programs has been designed for vice presidents and general managers. These programs run for one week, rather than two, and their content has been condensed to retain the concentration of attention on the Bi-State case within the framework

of a shorter work period. Some of the small-group discussion sessions have been eliminated, as have some of the discussion and case sessions on related topics. The purpose of these special sessions for company officers has been twofold: (1) to give these men first-hand acquaintance with the educational experience to which their department heads are being exposed, and (2) to give them an opportunity to think about longer-range problems ahead of the telephone business in an environment free from the pressure of daily jobs. It is anticipated that the first of these twin objectives will provide important reinforcement to the BSEC experience for department heads.

The Place of BSEC in Over-all Executive Development

HARD KNOWLEDGE about the process of development in mature executives is still unfortunately limited. More is known now, of course, than was recognized even as recently as five years ago—when the first series of Basic Bell System Executive Conferences was inaugurated. But our understanding of the influences that foster continued growth in the management capacity of men of experience and demonstrated performance needs to be extended and deepened. Else how can we act with confidence in planning programs that will encourage development to meet the de-

En route to a scheduled meeting.

mands that the future will place on managers?

The accumulating body of evidence suggests that programs like the BSEC series make their greatest contribution to overall executive development when they are effectively supported by other developmental influences.

First, participants should end their conference experience with a strong desire to continue their study after they return to their jobs, and should be given encouragement and assistance in doing this.

Second, their superiors and associates should understand and agree with the objectives and the methods of the educational program, preferably as a result of first-hand experience.

Third, those responsible for the formulation of development strategy and tactics should recognize that advanced management programs are only one of the forces that contribute to growth.

Planned diversification of job experience and the constructive influence of superiors (through the imposition of challenging performance standards, delegation, coaching, and other devices) represent opportunities to reinforce a man's ability and desire to think creatively, to welcome responsibility, to use his resources efficiently, and to direct organizational capabilities powerfully toward defined goals.

The true measure of the Bell System's performance in "growing" management talent to meet future requirements is therefore to be found not in the BSEC programs considered by themselves, but in the integration of BSEC within a planned comprehensive development effort that includes the constructive influences of jobs, supervisors, and formal educational programs. In the light of the substantial effort now under way to accomplish this integration, there is reason to be confident about the System's readiness to provide the necessary management resources for its dynamic future.

A professor of Business Economics discusses a grave threat to our nation's economy and what constructive courses are open to individuals, business, and Government

INFLATION: ITS CAUSES AND EFFECTS

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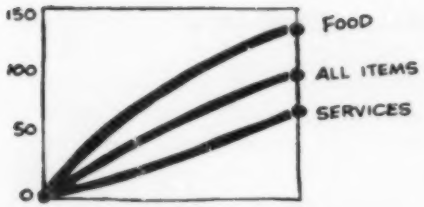
AT DINNER one recent night John Doe, 35, pushed back his plate and said to his wife, "On the way home in the train this evening I read an article in the paper. It said that, if this creeping inflation keeps going, my pension thirty years from now will be worth only half what it would be without inflation. Same with our insurance policies. That's a fine thing! Looks as if there's not much point in saving."

Replied Mrs. Doe, "I can't worry about things that far in the future when every time I go into the Super Market I find prices higher than they were last month or last year. Those chops you had tonight cost us plenty, and you won't get meat like that again for another two weeks. Seems I can never keep our food and clothing bills down to what we budgeted last January. You'll just have to hit the boss for another raise soon."

Conversations like this have recurred much of the time in postwar America. They suggest that people are aware of what inflation does to them; and all they as individuals can think of doing about the slow, inexorable rise in the cost of living is to get increases in their wages and salaries.

Of course, if they have retired and are living on fixed incomes like pensions, their plight is much worse. They are helpless to prevent the constant erosion of their planes of living. Month by month the country's income is being redistributed against them and in favor of the people who, in or out of labor unions, manage to have their incomes go up as fast as or faster than living costs. The fixed-income people come to entertain bitter feelings of injustice.

Now, in all honesty, it must be said that many employed persons inwardly almost welcome inflation. In part they associate it with full employment and better pay envelopes, even though the money in the envelope buys less than before. In part, too, they just don't understand inflation. At one and the same time they protest higher prices but favor the causes which bring them about. They fail to recognize inflation's ultimate dangers. Again, the older workers who lived through the deep depression of the '30's still fear unemployment much more than inflation. Probably, however, the nation's households would prefer not to experience inflation, even of the slow or creeping sort, if they thought they



Consumer prices.

could have full employment without it.

Is this possible? Can anything be done to achieve this wanted social-economic goal? If so, what and by whom?

To answer these questions we must first try to learn what causes inflation. You can't usually control or eliminate any unwanted effect or condition unless and until you understand what has been causing it.

INFLATION is a nation-wide thing, with of course some regional variations. Therefore, when we talk about its causes, we must remember we are dealing with the whole economy.

The causes may be considered under two main headings: (1) those having to do with total spending or demand by all the spending units in the country; and (2) those having to do with the costs of producing all goods and services.

Looking at the demand side, we ask first who the spending units are and what they spend their money on. There are two classes of private spenders — households and business enterprises; and one class of public spender—the national, state, and local governments. Leaving international trade out of the picture, these three classes of spenders are responsible for total demand in the whole economy.

Households spend their money on consumption goods, which are of two main kinds: (1) relatively perishable necessity goods like food and clothing, the purchase of which cannot be readily postponed; and (2) relatively durable "luxury" products like television sets, the purchase of which can for the most part be postponed if households wish to. To the extent that families can increase or postpone their purchases, their spending fluctuates considerably. Statistics show that the buying of automobiles, washing machines, and so forth rises and falls from year to year by substantial percentages.

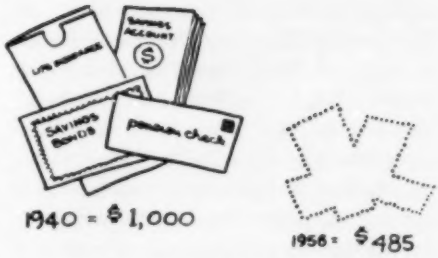
Business spends its funds on what economists call "investment" goods, which are also of two main classes: (1) inventories of raw materials and finished products; and (2) durable plant, machines, tools, and equipment. Spending on both these items may be stepped up or postponed. At any one time management may decide that the demand for its products is rising and may expand its plant and increase its inventories correspondingly. Or it may decide not to build up inventories and not to build new plant and production facilities, in the belief that a general business downswing is in the offing.

Business spending fluctuates much more than that of households. When firms decide to live hand-to-mouth, their investment spending may fall almost to zero. When, as in 1956 and early 1957, they believe the market is limitless, their spending may climb almost astronomically.

Public spending at all three levels means government buying of goods and services, such as typewriters and the typists who operate them; and such as roads, dams, and harbor improvements. Government spending does not include what are called "transfer payments." The latter, illustrated by social security taxes and pension payments, merely represent a transfer or exchange of spending funds from one private group to another, brought about via government.

CONSIDER NEXT what happens when there is a rise in total spending in the economy, caused by a rise in one or more of the private or public items of demand, uncompensated for by a fall in any other item. This may occur (1) at a time of recession and unemployment of capital and labor; or (2) at a time when full output and employment already exists. Under the first, the rise in total demand produces more output and employment, higher money incomes, and little rise in the price level. Under the second—when full employment already exists—the increase in spending results in no more output and employment. There is, however, a rise in money incomes, which when spent on the fixed output of goods and services, produce a rise in their prices, i.e., results in inflation.

What causes a rise in total demand? What makes consumers and business and government spend more? The first answers to these questions are easy, but they do not explain much. The ultimate answers are very difficult and obscure; if we knew the latter, they would explain everything. The best we can say now is something like this: Changes in private demand are the result of changes in the decisions of households and firms in respect to the amount and timing of their expenditures on the postponable items mentioned above. These decisions change when there are changes in the expectations of the spenders about the future and when there are changes in the confidence with which such expectations are held. When households and firms have rosy expectations and feel optimistic about future jobs, prices, incomes, costs, profits, and so on, their spending tends to rise.



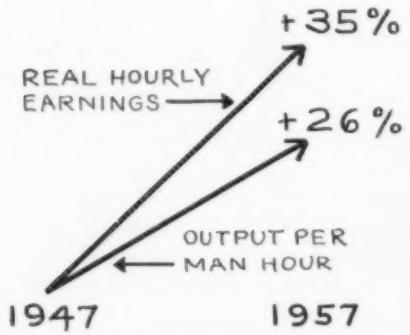
Decreased value of fixed incomes.

THE EXPECTATIONS and confidence of a special kind of firm—financial institutions—are particularly important. Through willingness to lend money to consumers and business, banks and other lending agencies have the power to create more money, i.e., potential spending power. That is, if bankers' expectations and confidence are favorable, they decide to lend more or to renew existing loans; and in this way they increase the quantity of money available for spending. It should be noted that as human beings bankers share the generally prevailing moods of optimism (or pessimism).

The decisions of government legislators and executives to spend less or more rest in part on international and domestic considerations and in part on the understanding that these men have of the relation of government spending to the economy. Expectations and degree of confidence are important here also, but they operate in a framework significantly different from that which influences households and firms. This is because government is sovereign and need not be swayed by profit-loss considerations in the same way that private spending units are.

The sixty-four thousand dollar question as to the demand causes of inflation is this: What causes people's expectations and confidence to get better? If we knew the complete answer to this one, we could be pretty sure of achieving true economic stability. But we don't. No one has yet invented a good expectation-detection machine. We are fairly certain that domestic and inter-

national political and economic events affect spending decisions. For example, wars and major defense efforts have always produced inflationary effects; and people act on this knowledge and memory, as they did when the Korean episode began. Major crop failures set up a chain of reaction. But, apart from major experiences like these, we do not know what makes men and women turn optimistic about the future. Maybe it's variations in sunspot activity and cosmic radiation; maybe not.



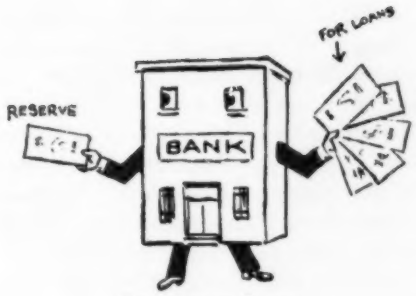
Real earnings up more than output.

In our search for causal conditions, turn now to a consideration of the cost side of inflation. Economists talk about the "cost push." By this they mean that when, for any reason (e.g., an increase in wage rates or in raw material prices), the costs of production are raised by an amount which is more than can be or has been compensated for by improved, cost-reducing methods of production and management, there is upward pressure on the prices of products. When costs increase in this manner, management of course wishes to protect profit margins. And it tries to do this by raising the prices of products. If product prices go up, we have inflation.

In the preceding paragraph we spoke of a wage rate increase higher than could be compensated for by past cost-reducing improvements in the methods of production and management. This must be explained. The effects of such improvements, which were accomplished by technological research and capital investment, are measured by a so-called productivity index. This index is a yearly series of figures, with one year used as a base, which show annual percentage changes in amounts of output per man-hour in the production unit. The production unit may be a plant, a company, an industry, or the whole economy. The unit used in wage negotiations since 1948 is the whole economy.

Since 1900 the annual increase in output per man-hour has averaged about two percent, since World War II about three percent. Another way of saying the same thing is that during these periods labor input per unit of production has declined by the above-stated percentages.

In 1948 General Motors, in negotiations with the United Automobile Workers, established the principle that wage rates should go up proportionately to the previous rise in the above-described productivity index. This cannot be criticized, at least on inflationary grounds, because costs are thereby brought up only to the point where they were before the productivity increase reduced them. There is thus no upward push against product prices. However, a serious mistake was made at that time and has been continued in subsequent negotiations: To the productivity wage rate increase was added a cost-of-living wage increase, plus fringe benefit increases. This meant that the total "package" was greatly in excess of the over-all amount allowable under the productivity formula. In short, the 1948 package and the more recent ones have been inflationary, i.e., have exerted cost-push on product prices. It is doubtless no accident that wholesale



Reserves vs. loans.

and retail prices did not fall much, if any, during the 1953-54 and 1957-58 recessions, contrary to the price-level pattern of all previous business downswings.

During the period 1947-57 output per man-hour in non-agricultural industry rose 26 percent, while real average hourly earnings thereia went up 35 percent. This excess betokened not only an inflationary cost-push but also a redistribution of income in favor of most of labor.

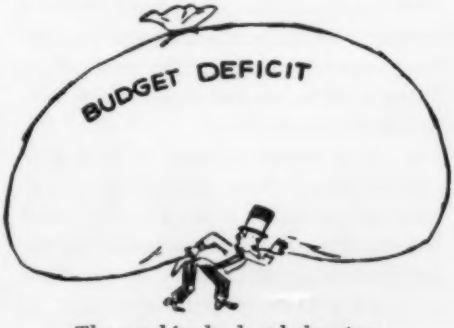
The demand and cost conditions producing inflation are closely interrelated. This is because every cost of production to business, e.g., wage rates, also represents potential income and demand to the persons owning the agent of production, e.g., labor. Thus, when excessive wage-fringe increases exert cost-push on prices, they at the same time tend to exert demand-pull on prices because the higher wage rates tend to create higher wage incomes and more consumer spending.

So MUCH for an introduction to the causes of inflation. What can be done to control the causes and thereby to provide a more stable price level without undermining our simultaneous objective of high level employment? What can consuming households do, if anything? What can business do? What role can government play?

Let us start with Government. Most economists agree that – despite mistakes which will be made because of political expediency, lack of knowledge, poor timing, and inability to predict the future– government can and should do a great deal, especially the Federal Government. It is the only agency large and strong enough to cope successfully with this problem.

Government has two weapons against inflation. One goes under the name of *monetary policy*, the other *fiscal policy*. By monetary policy is meant a number of measures by which government, through the Federal Reserve System, attempts to raise the quantity of bank money and the willingness of households and business to borrow and spend. By fiscal policy is meant the control of the Federal budget, which has to do directly with Government's own spending in relation to revenue from taxes.

In a period of actual or threatened inflation, Government can use the following monetary measures: (1) It can discourage commercial banks from lending to business and consumers (i.e., discourage banks from creating more money) by (a) increasing the percentage of reserves that banks have to keep against loans and deposits; (b) raising the interest rate that banks have to pay the Federal Reserve Banks when the banks borrow from the System in order to increase their reserves; and (c) selling government securities to the banks in order to decrease the latters' reserves and loans.



The need for budget balancing.

What business can do.

(2) It can discourage households and firms from borrowing from the banks and other financial institutions by (a) making the terms of installment purchases stricter; and (b) using the measures listed under (1) to raise the interest rates charged by financial institutions for loans.

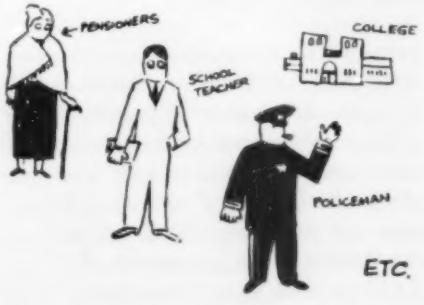
The fiscal prescription for preventing or curing inflation is this: decrease Government spending by balancing the budget or by running a budget surplus. A balanced budget simply means that Government spends no more or less than the spending it takes from the private sector through taxation. A surplus means that Government spends less than the amount taxed away from the private sector. (A word of caution here: A budget surplus and a budget in balance may not really be what they seem. Thus, a budget balanced in the accounting sense may really be unbalanced if the tax revenue now to be spent by the Government comes from those who would have hoarded the funds and goes to those who will surely spend them.)

As to cost-push inflation, Government could institute direct control over wage rates and prices, as it did in 1942-45 and 1950-52. But such interference with private decision-making is contrary to our basic economic philosophy and, for most of us, unthinkable in peace time.

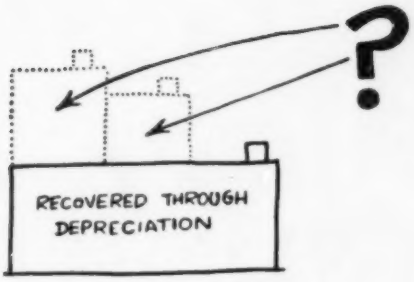
What can consumers and business themselves do to control inflation? Consumers cannot do much and should not be expected to act against their self-interest. This holds for consumers both as buyers and as workers. Corporations can, and should be expected to, make two important contributions. First, each firm can budget its expansion into the future a sufficient number of years ahead so that the usual inflationary spurt or bulge in investment spending during good years is minimized. Second, on the cost-push side it is to the self-interest of firms to present a solid front to national unions in their industries. Relative equality of bargaining power would thereby be established, unions could be stopped from whipsawing one firm against another, and wage fringe increases could be held within the limits allowable by past productivity increases.

VIEWED OBJECTIVELY, the chances of stopping creeping inflation seem rather slim. But we can't afford to give up trying, and we ought to redouble our efforts. For inflation is a perilous and insidious thing; it affects the many groups in the economy so differently and many people so seriously.

Among those most badly damaged are the unorganized salaried workers; all persons who have savings accounts, insurance



Victims of inflation.



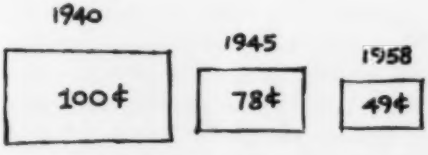
"Uneconomic" depreciation.

policies, or fixed dollar pensions that they are looking forward to receiving at retirement; our educational and charitable institutions; and the state and local governments. Finally and very importantly—because our laws in many respects are blind to the fact of inflation—it also affects many of our basic industries seriously and could impair their ability to contribute to a growing American economy.

All heavy industry, for example, is hard hit by the income tax requirement that depreciation accounts be limited to the original cost of plant built when the value of the dollar was much higher and the costs of construction correspondingly lower. In economic terms, this means that depreciation accruals are inadequate to cover the real costs of plant investment and that a portion of the nation's productive capacity is being taxed away as "profits."

The utility industry—including, of course, the telephone business—faces not only this Government taxing problem but also the problem of strict Government control of prices. While its costs, due to inflation, rise in unison with the costs of other industries, its price incomes under Government regulations have lagged. This serious "squeeze" has necessitated round after round of rate cases, with increases granted only tardily and in amounts inadequate to give the utility investor any substantial degree of the adjustment other investors have been able to make to inflation.

The remedy in both cases is quite clear. Government taxing and regulatory authorities should look through the accounting façade to the facts of inflation and value industry's fixed plant in terms of present dollar costs, not the costs incurred at earlier dates when the dollar itself was worth much more. The common equity of equal treatment for all citizens requires this realistic approach.



Yesterday's property value is greater in terms of today's dollars.

Mechanization and new methods will take place in Business Office operations, yet the Service Representative will continue to be the business voice of the Company

LOOKING AHEAD IN THE BUSINESS OFFICE

J. W. HULL

Business Office Engineer, DEPARTMENT OF OPERATION AND ENGINEERING, A. T. & T. CO.

How is the Bell System Commercial Department preparing to meet the challenge of its expanding business office job? In the future the business office must be ready to handle millions of additional calls and visits from customers every year, to collect the rapidly mounting millions of dollars billed every month, to effectively sell the expanding line of telephone equipment and service, while at the same time improving customer service and capitalizing on every modern technique for reducing expense.

Let us say quickly that, based on what we know right now, there are some pretty fabulous advances under development in business office operations which make us optimistic about meeting the Company's business office objectives of better service, sales, and collections at lower cost. And what seer can possibly predict the future developments, now undreamed, which may be just around the corner?

We see ahead a space-age business office quite different from what we have at present.

It will use machines to virtually eliminate clerical work such as order posting, bill stub posting, and collection notice writing.

It will use machines—high speed electronic computers and associated equipment—to help schedule the most appropriate collection action for slow-paying accounts.

It will be virtually free of bulky records.

It will be quite different in appearance.

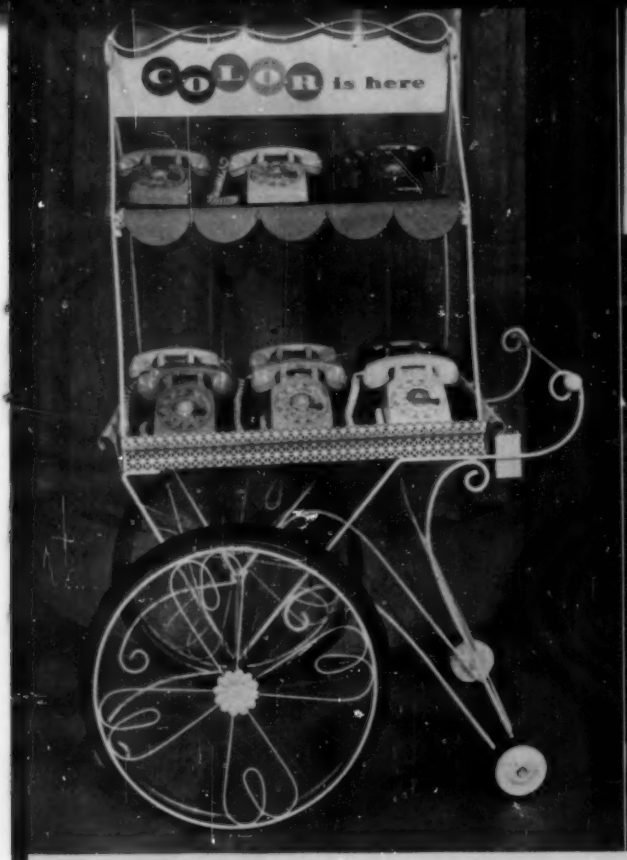
It will permit customers to dial directly to the service representative without first reaching the Company switchboard.

It will have machines to help service representatives quickly obtain any customer record in the office without moving from the desk and usually without interrupting the customer.

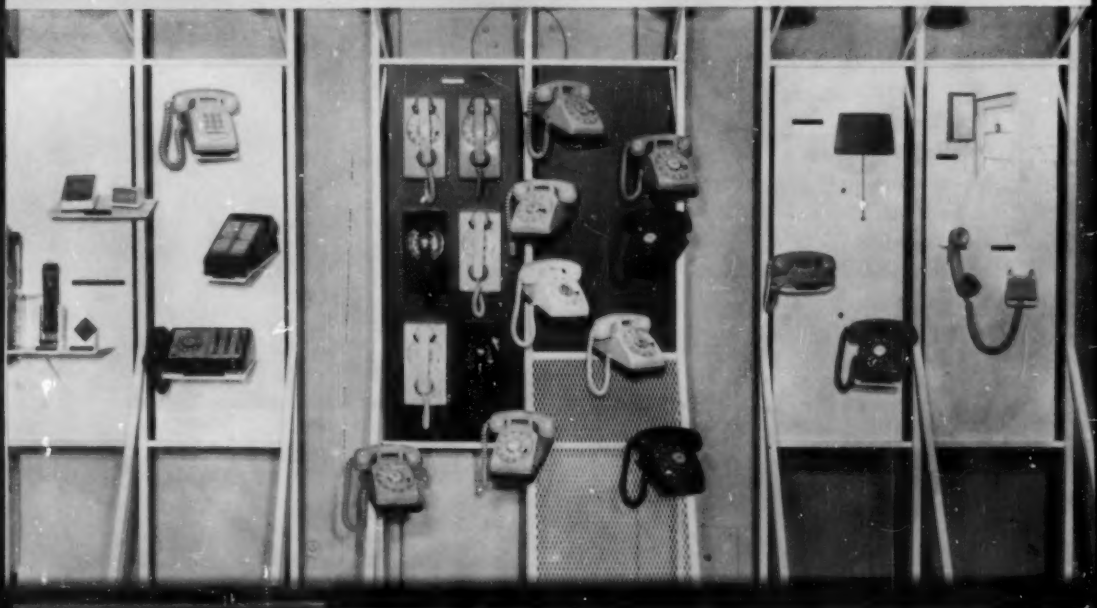
Its people will be trained by a new "machine method" now under development.

Its public office will have displays and exhibits of the latest telephone equipment to assist in meeting sales objectives.

Many of these changes are already under trial. Other promising ones are in the developmental stage and will probably not be fully tested for wide System use for sev-



Above—Public office displays seen by millions of customers help business office people sell complete telephone service. Below—Exhibits in the future will feature new items of equipment now under test and development. The business office sales job will be broadened to include such items as the home communications system, bell chime, small wall telephone, a new bedroom telephone, and new colors.



eral years. Others are just "dreams"; but in this rapidly changing world today's visions may be tomorrow's realities.

Even when all the mechanical and electronic advances have been accomplished, however, the basic business office job will be really very much the same as now. For the bulk of the work consists of talking with customers, either by telephone or in person, and there seems small hope of developing a machine capable of handling these transactions.

Indeed, would it be desirable, even if possible, to substitute some robot for the warm, friendly, personal contact with the business office service representative? As our over-all opportunities to see and talk with our customers decline, because of greater mechanization in other parts of the business, there seems obvious importance in maintaining high-quality human relationship with customers during business office transactions.

In 1958, Bell System business offices received 108,000,000 telephone calls and 115,000,000 visits from telephone users — a combined total approaching a million every working day! And these staggering figures are growing rapidly. In the last fifteen years, calls to telephone company business offices have increased nearly three times, and are continuing to multiply. They are averaging three calls per year per customer!

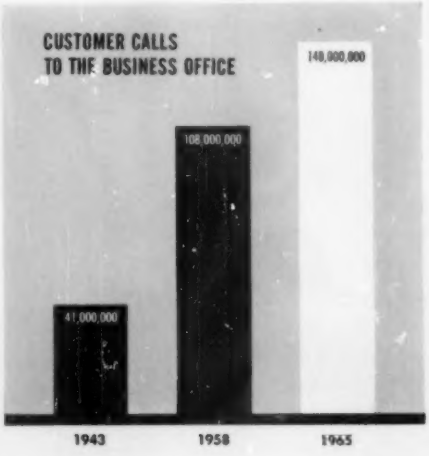
Each of these contacts presents at least three major opportunities to the Company.

First, to conduct the transaction with the customer so accurately, so thoroughly, so promptly, and so pleasantly that he will remember with genuine warmth his dealings with the Company.

Second, to help each telephone user understand the real pleasure and profit he can enjoy from complete telephone equipment for home and office and from effective and full use of the service—and to persuade him to buy.

Third, to hear what the customer, the user of telephone service, has to say about the Company. Why is he calling? What is he telling us that we should know to better serve him in the future? Is there a clue in the contact that will guide us, for example, to an improved form of billing, a more acceptable appointment plan for order work, an easier-to-use directory, a clearer toll statement, or to change some annoying aspect of our rates or practices? If we work to eliminate the things that cause customers to take the time to call or visit the Company, we will not only improve our service generally but we may be able to reduce the increasing volume of calls and visits. This means, of course, carefully evaluating the reasons why customers call the telephone company.

The variety of these calls is virtually limitless — for customers are inventive and somewhat unpredictable and the business is becoming increasingly complex. Service representatives who handle calls to the Company business offices rarely go through a day without encountering some new



question or an old one with a modern twist that requires the advice and more experienced judgment of a supervisor or manager. And the diversity and intricacy of these calls is increasing almost daily. Customers today want answers to questions about such things as: DDD, CAMA, AMA, amplifier sets, answering sets, speaker telephones, excise taxes, color telephones, installment billing, the Science series, Telezonia, and the transistor, practically none of which were known before the war.

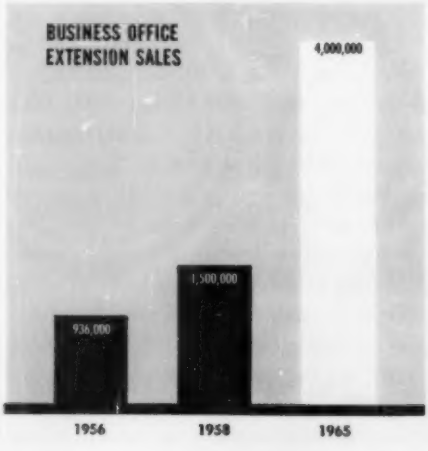
As the number and variety of calls to the business office increase with growth in the size and complexity of the telephone business, it is, of course, important that these transactions with our customers be well handled.

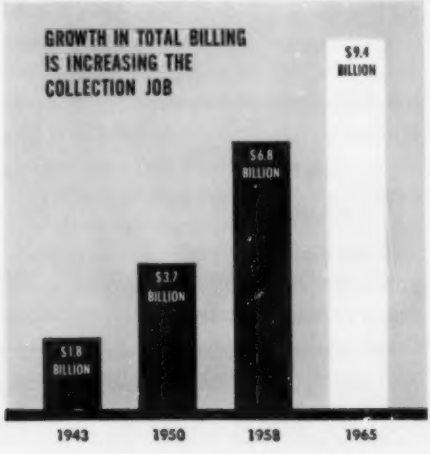
Experience with the business office, we think, plays a unique role in the over-all conclusions customers form about the Company because it is here that over-all policy is expressed; this is the place officially designated for transacting business with the Company. Here in the business office, then, the customer expects to find the Company's character most accurately reflected.

Good business office service includes making sure that customers really understand and accept the advantages of complete telephone service. More effective selling is a challenge which must be met by the future business office. Under development and soon available for customer use are many new products which will broaden the scope of business office selling. A home communications system, a new wall telephone, a bell chime, an auxiliary ringer, a farm communication system, a new small telephone, an arrangement for recessing the instrument, a wider variety of colors and many other items will add to the present extensive list.

Can we superimpose the sale of these new service items on the already complex job of the service representative? We think so. But trials of various organizational arrangements are under way to find out. Experiments will continue until the best plan is developed for all aspects of the business office job, giving full consideration to the vitally important collection work as well as service and sales.

Success in collecting the Company's money requires experience, sound judgment, persistence, tact, hard work, and use of mod-





ern methods and techniques, and is, of course, essential to financial soundness. No company can long survive high losses or failure of customers to pay for service. At the present time more than $600,000,000 must be collected every month from the 37 million customers in the Bell System — over $30,000,000 every working day!

In developing practices and methods designed to best meet the Companies' collection objectives, a delicate balance must be maintained between the financial side of the collection job and the customer relations obligations, so that over-eagerness to collect the money quickly and to avoid losses does not foster the use of techniques which are irritating to customers and may discourage the full use of the service.

Most customers, of course, pay their bills with reasonable promptness without prodding from the business office. But those who are slow because of neglect or inability to pay comprise the group which requires so much work and expense. In the beginning the service representative must obtain complete credit information, which is the foundation upon which is built future collection activities. Pertinent and up-to-date information about the customer enables the business office to decide whether a large bill is cause for concern as to the ability to pay or for satisfaction over wide use of the service.

Commercial people realize that each customer presents an individual problem and that collection effort which treats all customers in the same way is expensive and unwise. Individual treatment is the key to an economical and considerate job. Promoting habits of payment through friendly "educational" calls to customers is helpful in creating a feeling of good will toward the Company and in developing successful long range collections.

The future collection job in the Bell System will grow in importance as total billing increases. Billing per main telephone has increased from about $122 a year to nearly $200 a year in the last 15 years. Billing of $10,000,000,000 or more annually can be expected in the next ten years. Any

A Bigger Job Ahead for the Business Office

	1950	1958	*1965*
Letters from customers	3,400,000	4,300,000	*5,600,000*
Orders	29,000,000	42,000,000	*55,000,000*
Claims adjusted	3,000,000	6,600,000	*8,400,000*
Bill payments	268,000,000	369,000,000	*482,000,000*
Requests to customers for payment	37,000,000	43,000,000	*56,000,000*
Intra-company calls	70,000,000	63,000,000	*51,000,000*
Outside representative visits	1,900,000	2,500,000	*3,300,000*
Public telephone collections	$250,000,000	$372,000,000	*$486,000,000*

plan, therefore, for future business office operation must carefully consider the growing scope and size of the collection job and the vital need for wisdom and good business judgment in improving its effectiveness.

THE SERVICE REPRESENTATIVE is, of course, the focal point of business office operations. She is the key to good service, sales, and collections. Doing things to her job which will permit greater attention to contact technique is fundamental to better business office performance.

In meeting these aims, we expect to reduce to a bare minimum the clerical work now done by service representatives. This is desirable for several important reasons. It will give her time to do a thorough and attentive job while talking to customers—undistracted by any backed-up record work. She will not be tempted, for example, to slight a sales opportunity because her desk is piled with unaddressed collection notices. With the mechanization of all posting and completing of records, expense will be reduced. And, by the elimination of much of the monotonous and repetitive paper work which many girls dislike, force losses should be reduced and job enjoyment and attractiveness increased.

How will this be done? Primarily, we plan, by mechanizing a large part of the collection work.

This will eliminate the need for the service representative to write or address collection notices to customers. These notices will be prepared and mailed directly by machine. The business office will receive information from the electronic data processing system regarding customers who should receive personal attention, such as an education call in lieu of a written notice or a courtesy call prior to temporary denial of the service. Also listed will be customers who require special collection attention because of partial payment of the bill, exceptionally high toll usage, or any other reason deemed important by the business office.

The plan will retain complete flexibility in applying the fundamentals of good collection practice. This will permit automatic consideration of credit classes, types of "treatment," and other significant factors in determining what "treatment" action is appropriate and when. Each account will be individually analyzed and action taken as determined from the credit conditions of the particular account being reviewed. Current and historical collection and credit information accumulated by the business office will be included in the machine, together with all other considerations for determining appropriate treatment steps.

All of the information which Commercial wishes to record will go into the machine system automatically and is self-perpetuating. Preparation of customers' bills will be performed in the regular manner but the Commercial stub prepared for the business office will contain, in addition to the normal billing items, a nine-month treatment history, current and two prior months' additional message usage, the customer's preferred date for paying the bill, the amount of deposit held, and full credit information.

This plan will eliminate nearly 85 per cent of the payment reporting and posting now done by the business office and the work in connection with addressing, handling, and mailing of treatment notices. About 90 per cent of the credit cards now kept by the business office will no longer be required, and, most important, there will be greater assurance that appropriate collection action is taken, and at the right

Changed public office appearance will emphasize many products available for complete, convenient, and luxurious telephoning.

time, because into the machine will be put the best collection judgment of Company management. As many checks and balances as desired can be included. It should improve the quality of the over-all collection work considerably.

Another desirable feature under electronic data processing will be having a machine at the service representative's desk which would reproduce quickly and accurately almost any record needed in the course of a transaction with a customer. This would include, of course, a full record of the subscriber's equipment, or complete details of his bill including any payments and adjustments made during the current billing period, or credit information and collection history. This would mean that records would always be available and "in file," and "call backs" caused by inability to locate records would be largely eliminated. Walking around the office to obtain and refile records would be unnecessary. This searching for records now is usually at its peak when the office is busiest, when most of the service representatives' lines are in use, and when delays can be least afforded.

The third major step in improving the service representative's job will come through better training by using machines. A plan for "machine method" training is being developed and tested at a number of places, including Harvard University and The University of Georgia with encouraging results. Experiments in applying the method to training representatives have shown promise for improving the quality and reducing the length of business office training.

Teaching is accomplished through the use of a carefully designed sequence of

Example of Experimental "Machine" Lesson in Reading and Interpreting Toll Tickets for Service Representatives

To get the feel of the method, cover up the answers until after you have tried to fill in the blanks.

Question	Answer
1. When a customer makes a long distance call the operator makes a record of the call. A toll ticket is the record of a (1)_____prepared by the (2)_____.	*(1) long distance call* *(2) Operator*
2. If I have the operator put through a call from my telephone in New York to San Francisco she will prepare a _____.	*Toll Ticket*
3. After the call is completed the ticket will be used to bill the call to the customer. The billing record of a long distance call is the_____.	*Toll Ticket*
4. The toll ticket prepared by the operator is used for (1)_____ the customer for the call. Then it is sent to the Business Office. A customer's question about a call on his bill is answered by referring to the (2)_____	*(1) billing* *(2) toll ticket*
5. The representative must be able to interpret information on toll tickets in order to_____.	*Answer customers' questions.*
✕ ✕ ✕	
32. On person to person calls the operator enters the code letter "P" in the block marked "Class" on lower part of ticket. "P" indicates a _____ call. Locate block on ticket.	*person to person*
33. What code is used for a person to person call? (1) _____ Where does it appear on the ticket? (2) _____.	*(1) P* *(2) Class block*
34. Look at ticket #3. Is this a person to person call? _____.	*Yes*
✕ ✕ ✕	
43. Reduced rates apply to most toll calls placed after 6 P.M., or on Sundays and on certain holidays. Code letter "N" in "Class" block identifies these calls. Reduced rate calls carry Class code_____.	*N*
44. Night, Sunday or holiday calls placed person to person are coded "PN." PN indicates a reduced-rate, _____ call.	*person to person*
45. No entry is made in the Class block for station to station day rate calls. Absence of a Class code indicates a _____, _____ call.	*station to station, day rate*

statements covering the lesson material. One statement at a time is exposed to the student through a window in the machine. In every case a written response is required from the student, who then operates a lever to expose the correct answer to the problem for comparison. Built into the material is all the information the student needs to accomplish the learning objective of the lesson and sufficient repetition to insure retention. Each step is small, yet in taking it the student moves steadily closer to complete understanding.

This method takes advantage of the most modern concepts in the science of learning; it encourages the student to work by letting her know immediately whether her answer is correct or incorrect. Informative material can be absorbed as quickly as the capacity of the student permits. Fast students can proceed at their best speed and are not delayed by slow learners.

If the "machine method" is as successful as we hope, it will be possible to reduce the time and expense of all business office training and through better training to further improve service to our customers.

Reducing clerical work, eliminating bulky records, and streamlining training will all influence a change in the appearance of the future business office. Proportionately less space will be required, permitting the use of smaller, more flexible desks. But the public office—the front door of the Company—will be radically altered by the emphasis on selling and the need to display and demonstrate to our customers the telephone equipment of today and tomorrow.

IN 1958 nearly 115,000,000 visits were made by subscribers to telephone company public offices. Here, Commercial people recognize, are golden opportunities to show our equipment and to sell the value of the service. Over 24,000,000 Bell System customers have only one black telephone. Modern homes need many phones, and one of the best places to show and sell our wares is right in our own parlor—the public office.

When the customer is in the office, he can readily see from observing working models just how the many new items of equipment operate. He can quickly understand how these services will bring him greater comfort and convenience. Even if he doesn't buy during the first visit, he can hardly fail to appreciate the progress his telephone company is making in improving its equipment and service. And as he averages three visits to business offices every year, if he doesn't order immediately, at least the seed is planted for future harvest.

As we look around the office of tomorrow, we realize that this telephone company building is the only one many customers will ever enter. The public office, therefore, is a pretty important part of the "face" the company presents to the public. Discerning telephone users undoubtedly will note that this future office becomes the company and the community. It is modern, comfortable, business-like, and efficient. Obvious good taste is displayed in the furnishings, but neither they or the building give any impression of extravagance or waste.

THESE ARE SOME of the highlights of our plans for the business office of the future. Obviously, many of these developments will come slowly: they all must be thoroughly tested—some will be economically feasible in the large offices only—some will be changed as new techniques are discovered.

We feel that the service, sales, and col-

lection objectives of the company will be met. Improvement in expense will come through mechanization, simplification, better organization, and more effective supervision. The expanding amount of work not subject to mechanization, however, which must be handled in person—tellers taking payments and service representatives talking to customers—means a future requirement for more high-quality people. Knowing why customers call and taking action to anticipate their needs should help to reduce somewhat the assistance calls to the business office in the future. Despite the fine work being done in this field, however, the volume of customer calls continues to increase as the business grows.

Still essential, therefore, will be the service representative—the business voice of the company. Despite all the electronic marvels, more and more fine young women will be needed for the future business office. Our continuing aim is to keep the business office a good place to work so sufficient numbers of representatives can be recruited and trained to carry on the traditional standard of an always-improving Bell System service.

The business voice of the Company—the service representative. Representing the Company are over 20,000 service representatives in more than 3,000 business offices. Despite the mechanical marvels which will substantially reduce the business office clerical work in the future, the service representative will continue to speak for the Company, taking orders, settling claims, answering questions and, in addition, collecting the Company's money most pleasantly and at minimum cost.

An early practitioner of sound public relations pointed out the path which the Bell System has followed positively for more than half a century

THEODORE VAIL'S PUBLIC RELATIONS PHILOSOPHY

II—*Concluded*

CONNIE JEAN CONWAY

Staff Assistant, ALABAMA CUSTOMER RELATIONS SECTION, SOUTHERN BELL TELEPHONE AND TELEGRAPH COMPANY

NOTE: *Miss Conway was until last March a graduate student at the School of Journalism, University of Wisconsin. For her Master's thesis, under the guidance of Professor Scott M. Cutlip, she studied the policies and practices of Theodore N. Vail, who from 1878 to 1887 was general manager of the American Bell Telephone Company and its successor companies, and from 1907 to 1919 was president of the American Telephone and Telegraph Company. Miss Conway is now an employee of the Southern Bell Telephone and Telegraph Company at Birmingham, Ala. The first installment of selections from her thesis appeared in this* MAGAZINE *for Autumn 1958.* EDITOR.

UNDER THE guidance of Theodore N. Vail, a systematic program to provide the public with a knowledge and understanding of the Bell System was undertaken. Vail summed up his policy governing publicity when he said:

> The only policy to govern this publicity is that whatever is said or told should be absolutely correct, and that no material fact, even if unfavorable but bearing upon the subject, should be held back. When we see misstatements, make it certain that those making them have correct facts. This will not only tend to stop the making of them, but will lessen the influence of them by decreasing the number of misinformed, and any excuse for misstatements. Attempted concealment of material facts cannot but be harmful in the end, for in these days of investigation, concealment can be but temporary . . .

Conforming to his belief in thorough investigation, Vail gathered together data concerning the company soon after his return. The *Literary Digest* wrote:

> President Vail went at that new company like a young man with a new broom. . . . He had an appraisal made of the entire property of his own company; figures at hand, he opened wide the door of publicity, and stockholders and reporters gained free access to information formerly withheld.

Theodore Newton Vail, president of A. T. & T. from 1907 to 1919.

American business subscribing to "the public be damned" philosophy had long given more attention to suppressing information than to releasing it. With the newspapers, books, and especially the magazines devoting increasing space to exposure, however, few business activities remained secret by the end of the Muckraking era in 1912.

On the defensive, American corporations at first "sat helplessly by, inarticulate and frustrated, waiting apprehensively for the next issue of *McClure's Magazine* to come from the presses." As the exposures continued, some turned to advertising pressure while others organized press bureaus in an attempt to reach the public with their side of the story. On the whole, however, such attempts were largely whitewashing and press agentry.

There were some who balked at such practices. One such person was Theodore N. Vail. As we have seen, Vail first saw that the Bell System was in order and then began a program, not to *form* public opinion, but to *inform* it.

The program to develop understanding on the part of the public by providing full and correct information was undertaken primarily through (1) written statements by Bell System officials, (2) speeches before a variety of groups, (3) publication of pamphlets, brochures, and books, (4) institutional advertising, and (5) newspaper releases.

Probably the most enterprising of these

The Telephone's Burden

EVERY day brings a new use—a new requirement. It is the Telephone's Burden not only to keep pace with business development, but to camp constantly a little across the frontier.

Can you imagine a city, as cities once existed, made up of several "quarters," to each of which was confined a population which spoke a separate language?

You, as the average citizen, would be forced to learn several languages, or to go about the city with an interpreter - a process that would seriously interfere with your business.

If, instead of using different languages, the people of a city used *different telephone systems*, the result would be exactly the same. You would have to keep *each particular brand* of telephone.

It is nobody's *fault* that this is so. The Bell companies are not responsible for the fact that a nation's convenience demands the use of one telephone system, any more than they are that *one language* for a nation is better than a collection of provincial dialects.

The associated Bell companies, with their singleness of purpose and unity of service, *are* responsible, however, for doing their utmost to *provide the system that wholly fits this recognized condition*—that prevents the endless and expensive confusion of many systems.

The Telephone's Burden is to embrace in *one* comprehensive system all that a city, or the whole country, needs in the way of telephone service.

This has made the telephone universal.

To-day's work of carrying sixteen million messages—some of business, some of joy and some of sorrow—is not all of the *day's burden*, either.

Preparing for to-morrow's quota of message-passengers on this great national highway of speech is a labor quite as heavy as to-day's actual work.

For in the Bell service to-morrow never comes.

The associated Bell companies' eighty thousand workers are *always* preparing for it—always working to keep pace with the new requirements, forecast by to-day's routine.

People have rapidly developed this *new sense*—the sense of projecting speech. As the sense develops they are learning more about the telephone's possibilities. Twenty million minds are constantly finding new uses for it.

We must immediately adapt the entire Bell system to these new uses.

A realization of this widespread work should clear your mind of doubt, if any exists, that the associated Bell companies are working *with* and *for* the public, striving by the most progressive methods to provide a telephone service that will take your voice anywhere that your thought goes, or your friend goes, or your letter will travel—sometimes even farther than your imagination will carry you—, whether it is half way across the town or half way across the country.

The Bell service is diligently keeping pace with the country's progress, in full knowledge of existing conditions and the necessities of the future.

It goes to the public with such statements as this, in order that all telephone subscribers may understand the position it occupies as a utility, may make their demands on the service intelligently; may readily see that rates must perforce be regulated and continue on an equitable business basis in order to provide the maximum number of subscribers—to make the system universal, that they may fully understand that co-operation of subscriber and telephone company is the *surest guarantee* of good service.

American Telephone & Telegraph Company

And Its Associated Bell Companies

One Policy—One System Universal Service

UNITING OVER 4,000,000 TELEPHONES

An "institutional" advertisement of half a century ago.

programs was the inauguration of a national advertising campaign in June of 1908. At the first meeting of the Bell System directors after Vail's return, he is reported to have told the group that he was going to spend $250,000 in advertising the telephone. The directors remarked that everybody knew about the telephone. "Certainly," Vail replied, "but everybody is not thinking about it."

Soon after Vail took office, an experiment with institutional advertising was conducted by James D. Ellsworth in Rochester, New York. Ellsworth relates in his diary that whereas President Fish was a strong advocate of newspaper publicity, Vail chose to emphasize straight advertising.

A letter dated April 6, 1908, from a representative of the N. W. Ayer advertising agency to his Philadelphia headquarters tells of conferences with Vail regarding a national advertising program. The Ayer representative wrote that the Bell System did not seek through advertising to get more subscribers, but rather to create "a more general atmosphere of satisfaction among the subscribers they already have on their books." The letter continued:

> The telephone company wants to please the public and no one can tell the public this in so many words because they won't believe it. A great many people look on the telephone company as a big monopoly and they think as they have got a monopoly they are going to pursue a "public be damned" policy, but this is not so. The telephone company is just as careful of details and wants to please the public really more than some smaller corporations would ever think of doing.
>
> What we want to put in this advertisement, if Mr. Vail should entrust us with it, is to write a series of advertisements which will sink down deep into the hearts of all classes of people who use the telephone – giving them facts and explaining all the troubles which are experienced in running a big telephone company in any part of the country and end it by taking the reader by the hand and leading him through the various intricacies which are confronted by the telephone company and after the public has made this trip through these intricate passages, they should have a great and more abiding faith in the good intentions of the telephone company . . .
>
> When we get as far as writing the advertisements for the telephone company we have a first class individual "character" to identify their series in the use of a picture of the *bell.*

Two months later the institutional advertising program of the Bell System became a reality as the first advertisement appeared in a national magazine. There is some discrepancy as to whether the Bell Seal or its resemblance appeared in the first advertisement. According to Ellsworth, a Bell Seal did not appear until the second advertisement or series of advertisements, but the letter of the Ayer representative would seem to indicate that at least a picture of a bell was to appear.

THESE EARLY advertisements emphasized a single system, told of the technical improvements, presented facts about the System, and gave advice on the proper way to make calls. An advertisement scheduled to appear in a November, 1908, magazine was to feature in display headlines: ONE POLICY, ONE SYSTEM, UNIVERSAL SERVICE. Some of Vail's advisers thought that this headline suggested that the Bell System had the characteristics of a trust and that it might invite attack by politicians. Vail asked Ellsworth if the statements in the advertisement were true. When Ellsworth replied that they were, Vail said: "Very well, then, let's print it and beat them to it."

A copy of one of the first institutional advertisements appears in *The History of An Advertising Agency*, a story of the Ayer Agency. The purpose of the advertisement, according to Hower, was "not so much to sell a product or service as to inform and explain, in order to calm any fears that people might have had regarding the growth of a telephone monopoly." Entitled "The Telephone's Burden," the subhead said that the burden was "not only to keep pace with business developments but to camp constantly a little across the frontier." The body of the advertisement emphasized the same ideas found in Vail's annual reports: one universal system, the telephone's preparedness, and efficient service. It also asked for the coöperation of subscribers with the company in order to achieve perfect service.

After the program for institutional advertising in national magazines had been in operation for a year, Ellsworth sent a note to Vail asking for double the money spent the first year. Vail agreed, and thus evidently felt that the program was effective.

Vail's first annual report in December of 1907 was thought to be too frank by some company directors. When they suggested that some statements might be advantageously left out, Vail replied: "No, we will lay our cards on the table; there is never anything to be gained by concealment."

The publication of pamphlets was not confined to the A. T. & T. Information Department or even to the A. T. & T. company. The preparation of many of the pamphlets was undertaken by the Legal, Accounting and Commercial Engineer's departments. Many of these pamphlets were reprints of speeches given by officials of the Bell System. A number of the larger Bell operating companies also published pamphlets and brochures. Many of these were reprints of speeches. Some, however, were especially written to give the public information regarding the Bell System, the use of the telephone, and the service provided by Bell.

Although there does not appear to have been an organized speakers bureau, as we know them today, in operation while Vail was president, the company officials were frequent speakers at meetings of clubs, associations, federations, and educational institutions. Many of these talks were delivered by Vail; Nathaniel T. Guernsey, general counsel; N. C. Kingsbury, vice president; and E. K. Hall, vice president and appointee of Vail's to supervise the public relations with the general public. A number of their talks were reprinted in the form of pamphlets for distribution. Vice President Guernsey, beginning around 1914, devoted part of his time to visiting and lecturing to university and college students, especially to law and business students. Guernsey's purpose was to acquaint these students with the viewpoints of public utilities and the Bell System.

Following the opening of the transcontinental line in January of 1915, Vice President Kingsbury gave special demonstrations of the new line in cities throughout the country. Each member of the audience heard cross-country conversations through individual telephone receivers. Some even talked over the line themselves. What better method of informing could have been used!

Thus through the above described publicity program Vail sought to inform the public, to give them an understanding of the Bell System, and to gain support for his system. This support was to be deserved with the Bell System providing effi-

cient, economic, and continually improving service in the public interest.

"THE RELATIONSHIP between the employees and the public, and vice versa, is so closely knit that no effective differentiation can be made," declared Vail.

This is doubly true for public service organizations such as the American Telephone and Telegraph Company. These employees come into personal contact with the public in their home as well as talking to them over the phone.

Theodore N. Vail was one of the first American businessmen to perceive the public relations role of the employee. Speaking of A. T. & T., Vail said: "There is no utility so dependent upon the service rendered by employees as this."

On his return to the telephone business in 1907, Vail set about systematically training Bell employees in their roles as public relations representatives . . . That Vail recognized the employees' needs is demonstrated by the following statement:

> The studies of salaries, wages, and working conditions is one of the most important duties of the executive, and the changes should be made when they are due without waiting for demands; to see that the employees are properly paid and their work recognized is the duty of the superior officer.

Good employee attitudes were not left to chance by Vail. He undertook a systematic program to develop in each employee a public service attitude and a loyal and coöperative spirit. It was Vail's belief that the public attitude was determined not only by the quality of the service, but by "the *attitude* of those giving the service and coming in direct contact with the public. . . ." One writer said in 1912:

> Vail recognized the vast advantage of securing the good-will of the public. He went straight about it. He went after it by making his men realize that the public paid them their salaries, that the Bell Company was merely paymaster, and that it was time they began better to serve their real bosses.

Completion of the construction of the first transcontinental telephone line in 1914 was a high spot in Mr. Vail's presidency.

The concept that the officers "function in a semi-public capacity in a manner similar to the government office holder" was developed. Regarding the contacts between the employee and the public, E. K. Hall, chosen by Vail to direct the relationships with the public, said: "Those people are all right. I just kind of like to do business with those people, because I feel better every time I get through doing business with them." Danielian writes that if this reaction is produced when there is a contact between an employee and the public "A. T. & T. will have no trouble with public relations and public opinion."

By the end of the war there were 233 carefully selected Bell operators who spoke both English and French serving with the U. S. Signal Corps in France.

THE DEVOTION and loyalty of the employees was praised in a 1914 magazine article. The article related instances of heroic devotion to duty by Bell linemen as they worked to keep the lines open.

The Bell System and its employees were also praised by the Federal Government, the press, and the general public for their service during World War I. Large amounts of telephone equipment and supplies of all kinds were manufactured for use by the various branches of service. Telephone facilities in important centers of communication in both this country and overseas were expanded, which naturally entailed the training of more operators.

One example of the work done by the Bell System gives an insight into the varied services rendered. Skilled Bell employees were provided to construct and operate a telephone system for the armed forces in France. Bell engineers assisted the Signal Corps in designing the new system and women operators fluent in French were gathered together and sent in groups to France. When it was found that there was not a sufficient number of such operators, A. T. & T. screened and selected applicants who could speak French. They were then trained in the specifics of telephone operating.

A large percentage of such work was performed by the Bell System and its employees prior to government control of the

country's communication systems. In all some 14,000 Bell employees, exclusive of Western Electric employees, entered the service. A large number of the employees entered special communication units. For example, some fourteen battalions of picked officers from the Bell System joined the Signal Corps. The *New York Times* said of these battalions:

> The American Telephone and Telegraph Company has given to the United States what is perhaps the finest auxiliary signal corps possessed by any army. By arrangements with the War and Navy departments the telephone officials will furnish picked engineers to the army and navy, paying them the difference between their army pay and their salaries with the telephone company. About 500 engineers have been selected already for this work, and some of them have been sworn into the Government service.

With the operators thoroughly trained to provide courteous and efficient service, the "voice with the smile" came into existence. Commenting on this new "voice" Paine remarked that "it was the echo of Theodore Vail's own voice throughout the entire system." By 1913 the Bell System was encouraging the customer to return this smile. An advertisement in the *Wall Street Journal* entitled "Courtesy Over the Telephone" closed with this statement in large type: *The Voice With The Smile Wins.*

Other telephone employees were also trained to provide the most efficient service possible in an accommodating and courteous manner. Linemen, equipment installers and office employees were taught to be considerate of the public's time, property, and opinion.

Writing in 1915, Vail said that one of the most difficult problems that A. T. & T. had solved was that "arising from the intimate, exacting, and delicate relations with the public . . . peculiar to the telephone service because of the confidential personal relations with its users." Continuing he remarked: "The employees of the service who come in close relation with the public recognize that courtesy and patience make their task pleasanter and their relations more agreeable, and the public are fast responding to this silent appeal."

A year later Vail accepted, on behalf of the A. T. & T. Company, the Elliott Cresson Medal awarded by the Franklin Institute. In accepting this award he gave tribute to the employees as he said:

> The telephone service is an individual service, rendered to individual users by the individual members of the telephone organization.
>
> It is a service dependent upon the right thing being done at the right time, by the right person, in the right way. To the extent that when all this is done the service is good; if any fail, to that extent the service is defective.
>
> This requires on the part of every individual member: to the organization, loyalty; to their obligation, fidelity; and, in the performance of their duty, conscientiousness.
>
> This award is, therefore, a personal tribute to each individual connected with the service, to the full recognition by them of their obligation to the organization and to the public, and each one will so feel and appropriate it.

Thus through the creating of satisfied, well-trained employees with a public service consciousness, the Bell System developed an army of public relations representatives. The "voice with the smile" came to symbolize the Bell System, which under the leadership of Vail improved its service, its personnel, and its attitude.

Who's Who & What's What

(Continued from page 3)

ulty at Carnegie Tech's Graduate School of Industrial Administration, his academic background includes degrees from Harvard College and Harvard Business School, and teaching assignments at Indiana University, Harvard Business School, and Stanford School of Business. He had government experience with the War Production Board during World War II and with the Defense Production Administration in 1951. He has helped to plan and has participated in teaching executive development courses at the universities of Wisconsin and Georgia, as well as the Carnegie Program for Executives. He is a consultant to the Office of Defense Mobilization on matters affecting national defense, and to several business concerns on management, marketing, and executive development problems.

A TEACHER SINCE 1921, CARROLL R. DAUGHERTY has devoted himself for the last 30 years entirely to the broad field of Economics. He has been professor of that subject at the University of Alabama, the University of Pittsburgh, Hunter College, and now at Northwestern University, where, from 1948 to the present, he has been chairman of the Department of Business Economics. He has served as a member of numerous state and federal organizations and departments and as advisor to many important boards having to do with labor and economic affairs. He is a member of numerous distinguished national associations and the author of several scholarly books in his particular field.

J. W. Hull

J. W. HULL, Operation and Engineering Department business office engineer, has spent most of his telephone career in Commercial Department work. After leaving a temporary assignment in the Engineering Department, where he started with the Southern California Telephone Company, he was successively collector, service representative, coach, public office manager, manager, and district manager—except for four years in the Navy during World War II. In 1951 he came to A. T. & T. as an engineer in the commercial division, where he worked on improving business office service. Returning to the Pacific Company in 1954 as general commercial supervisor in San Francisco, he was appointed assistant general commercial manager for the Northern California Area nine months later. In 1957 he became assistant to the vice president in the Northern California Area with responsibility for analyzing operations and expense in all departments in preparation for the California rate case. After the rate hearings ended, the call of the business office was strong and in early 1958 Mr. Hull returned to the American Telephone and Telegraph Company as business office engineer.

A NATIVE OF Birmingham, Alabama, MISS CONNIE JEAN CONWAY received her B.A. degree in Journalism from Birmingham-Southern College in June 1956. In September of that year she entered the University of Wisconsin under a graduate research studentship awarded by the University's School of Journalism. To complete her requirements for a Master of Science degree in Journalism she wrote her thesis on "The Public Relations Philosophy of Theodore N. Vail," from which we are privileged to publish material. Her second chapter deals with Public Opinion, Public Interest, and Public Service, and is freely quoted—in two parts—in the Autum 1958 issue and in the present issue of this MAGAZINE. Miss Conway received her M.S. degree last February and returned to Birmingham, where she is now a staff assistant in the Alabama Customer Relations section of the Southern Bell Telephone and Telegraph Company. Her picture was published in the Autumn issue.

HEADQUARTERS SUMMARY

September 15 to December 15, 1958

A TRIAL of pushbutton telephones in electromechanical offices will start early in 1959 at Hamden, Connecticut (Southern New England Company), working with step-by-step equipment. The trial will later be extended to Elgin, Illinois, working with No. 5 crossbar equipment.

Pushbuttons will replace the dial in 500-type sets and translators will be installed in the central offices. In both cities the sets will be installed in a sample of about 200 business and residence telephones. In Elgin a 10-button set will be used. In Hamden the 10-button set will be used during part of the trial. During the remainder an 11-button set will be tried. The eleventh button will provide direct access to CAMA equipment.

The trial is designed to determine primarily dialing speed, dialing accuracy, and customer reaction. Results of customer interviews, dialing performance, and other technical data should be available in the early summer of 1959.

IN VIEW of the increasing amount of money being spent annually on station movement, particularly rearranging and changing key telephone systems, O. & E. Engineering and Plant people have taken an intensive look at the general key telephone system program. Working with the Laboratories and Western Electric, a number of different items have been "model-shopped" and several product or market trials of them have been made. As a part of this picture a letter was recently sent to the Operating Companies on simplifying the terminating of some 30 or 40 mounting cord conductors to a like number of inside wiring cable conductors at multi-button key telephone sets. This involves the use of miniature connectors for connecting key telephone sets to cables on a "plug-in" basis.

In order to determine promptly whether the advantages of using small quick-connect mass-conductor terminating methods and devices can be proven economically under normal field operating conditions, arrangements have been made with Western Electric to put connector-ended cords on the most popular code of 6-button telephone set and, together with matching sections of connector-terminated cables, make them available before the year is out so that they can be evaluated as extensively as necessary.

THE "Four Steps to Sales" film, which was presented to the Companies in April 1957 as part of a training package on business office selling, was a first place winner in the 6th Annual Awards contest sponsored by the National Visual Presentation Association and the Sales Executives Club of New York. "Four Steps" received a Certificate of Award for the best motion picture of 1958 in the sales training category. In addition, it was selected from the total of 33 winners in six categories for showing at the awards luncheon.

THE FIRST of 10 models of a new automatic call distributing system has just been placed in service in a department store in Baltimore. Three others will be installed during the next few weeks in Cleveland, Detroit, and San

Diego. The balance will be sold by the New York Telephone Company.

This system, originally designed by Illinois Bell but containing several modifications by engineers of the Customer Telephone Products Planning Section of A. T. & T., is expected to provide a much more economical order-taking arrangement in the 15-35 position range than the present 6A Order Turret System. The equipment is packaged in an attractive cabinet that matches business office furniture, and is designed to be installed on a plug-in basis.

STARTING with a Christmas broadcast last year on a limited Pacific Coast network, broadcasters have been showing increasing interest in stereophonic sound channels for their TV network broadcasts.

Stereophonic transmission makes use of two separate channels from the pick-up to the loudspeakers in the listener's home. This technique provides a realistic appreciation of the location of the participants in a broadcast. The fidelity of the illusion depends on almost exact similarity of the two transmission paths – that is, both must have the same quality, noise, and time of transmission of signals from microphones to loudspeakers. The broadcaster uses his TV sound channel for one path and his affiliated radio station channel for the other. Listeners require a broadcast receiver in addition to their TV receiver.

For Bell System facilities used in network broadcasting, the transmission time is the critical new factor. It has been tentatively established by a group of broadcast and Bell System engineers that the time of transmission over the two channels should not differ by more than 1/100 second. This means that in establishing stereophonic facilities, special engineering effort and substantial rearrangements of normal routings are required.

MICHIGAN BELL has contracted with the Burroughs Corporation for the lease of an electronic data processing system to be used in "streamlining" the many interdepartmental phases of service order handling. This is a pioneering effort and represents the first such application in the Bell System.

The computer procedure contemplated will permit automatic processing, on an integrated basis, of a number of the principal service order functions now performed manually or by punch card machine procedures by Plant, Traffic, Commercial, and Accounting forces. One centralized data processing center, to be operated by the Accounting Department, will serve the entire city of Detroit.

INFORMATION has been sent to all chief engineers and general plant managers on the application of the ready-access terminal principle to existing paper insulated cables. This is done by bridging a short length of 50-pair even count PIC cable to the paper cable and placing a ready-access type terminal on this PIC cable stub. Operating economies and increased flexibility can be realized by installing the new facility to replace defective sealed type terminals or where an additional terminal is needed.

A NEW stain- and discoloration-resistant plastic is being introduced in the manufacture of color telephone sets. The plastic which has been used up to the present time has had a noted tendency to stain and discolor due to tobacco smoke and cosmetics. The new plastic, commercially known as Cycolac, does not introduce any manufacturing difficulties and should produce appreciable savings to the System, since discoloration resulting from lipstick, tobacco smoke and the like can ordinarily be removed by the use of household soaps or detergents. Some telephone set components are currently being produced in Cycolac and complete cutover is expected during the first quarter of 1959.

AT THE YEAR END, the Bell System debt ratio stood at approximately 34½%. This figure is close to the 31% debt ratio with which the System emerged from World War II. This is no accident, but a result of the principle adhered to by the Bell System for many years – that about two-thirds of its capital should be in the form of equity or of potential equity. Convertible debentures come under the latter category.

The System's success in holding to its capital structure objectives in the post-World War II period is remarkable. In this 1946-1958 period the System added over 13¾ billion dollars of capital, or more than three times the investment that had been built up over the preceding 70 years. Only about $1⅛ billion of this came from retained earnings, and the System had to raise the remaining $12 billion in the securities markets in the face of low System earnings, particularly in the early postwar years, and intermittently weak equity markets.

The key to the solution of the System's prob-

lem lay in its use of convertible debentures. Over 5½ billion dollars has been raised since World War II through the issuance and conversion of these debentures – with a minimum of risk, and without damage to the System's credit standing. These results would have been much more difficult to achieve without the help of convertible debentures.

Fortune Magazine recently published two articles devoted to the history, organization, and activities of Bell Laboratories. The first is in the November issue of *Fortune*, and is entitled "The World's Greatest Industrial Laboratory." The second article, in the December issue, has the title "Tomorrow's Telephone System." Research activities are the main theme of the November article, while the second deals mainly with current Laboratories development work and its possible impact on the Bell System. In addition to a considerable amount of text, the articles include many diagrams and color and black-and-white photographs.

The Blue Pencil

AGAIN artist John Gaydos demonstrates his versatility – this time with a cover design depicting the business office of the future, which employs mechanization as it becomes practicable while still entrusting sound customer relations to "the voice of the business" – the service representative. Mr. Gaydos is the New York painter who executed last Autumn's handsome cover painting showing the vista of telephone buildings stretching to the horizon, which attracted a good bit of favorable comment.

The present cover, incidentally, relates directly – if symbolically – to Jerry Hull's forward-looking contribution about business office service, which begins on page 42.

TIME NOW to delve into the files again, to see what has accumulated since last we looked into that repository of miscellany. (Incidentally, we are still fond of the nickname by which files were referred to when, long years ago, we served Uncle Sam in Italy. They were regularly called the *Campo Santo* – which means, of course, cemetery.)

Here is a recent letter which pleases us greatly, because colleagues had advised against publishing "The Great Hurricane of Twenty Years Ago" in last Autumn's issue, on the ground that it was just ancient history. Writes our correspondent, from Michigan:

"I was very interested in reading your article . . . I went to Providence, R. I., from Grand Rapids, and worked in a supply group helping restore service. I still look at newspaper clippings and pictorial magazines I brought back, together with photographs I took. Yes, it was an interesting article, especially to the people who worked there."

So, welcome to one kindred spirit!

"FAN MAIL" is, as we have remarked before, an understandably infrequent occurrence. When an occasional letter does appear, it is

likely to be of unusual interest – as witness the request, written in a youthful hand, to be added to the mailing list of this MAGAZINE. It contained this statement: "Both my mother and my grandfather are stockholders; and my great grandfather, Mr. Vail, was a president of your company." He is getting the MAGAZINE regularly, it goes without saying; for Theodore N. Vail, often termed the great builder, was president of A. T. & T. from 1907 to 1919.

HOW DOES an editor find out what readers like about his publication? By chance, sometimes – even if not often. In the "miscellaneous" column of another Bell publication appeared not long ago the following item from one of its readers: "The regular telephone publication feature which has the most stimulating interest for me is Headquarters Summary in the BELL TELEPHONE MAGAZINE . . . The items are provocative conversation pieces . . ."

Well, whether or not you believe we already have enough conversation, that's a vote – the first – for this regular feature of each issue.

TWO THINGS which greatly irk an editor are typographical errors he commits and anonymous letters he receives. They are both occupational hazards, and we combined them in one package in connection with the Autumn issue when we omitted one letter on page 7 of President Kappel's address to the Pioneers – and promptly received a sneering note which concluded "Tch! tch! Tch! (in Mr. Kappel's talk yet!)" Mea culpa.

HOW HARD – practically impossible – it is to kill off an erroneous legend is well illustrated by the tale of Joshua Coppersmith. We had thought him dead and decently interred, but he is cropping up again – not only in the public press, but even in the pages of some company magazines of the Bell System.

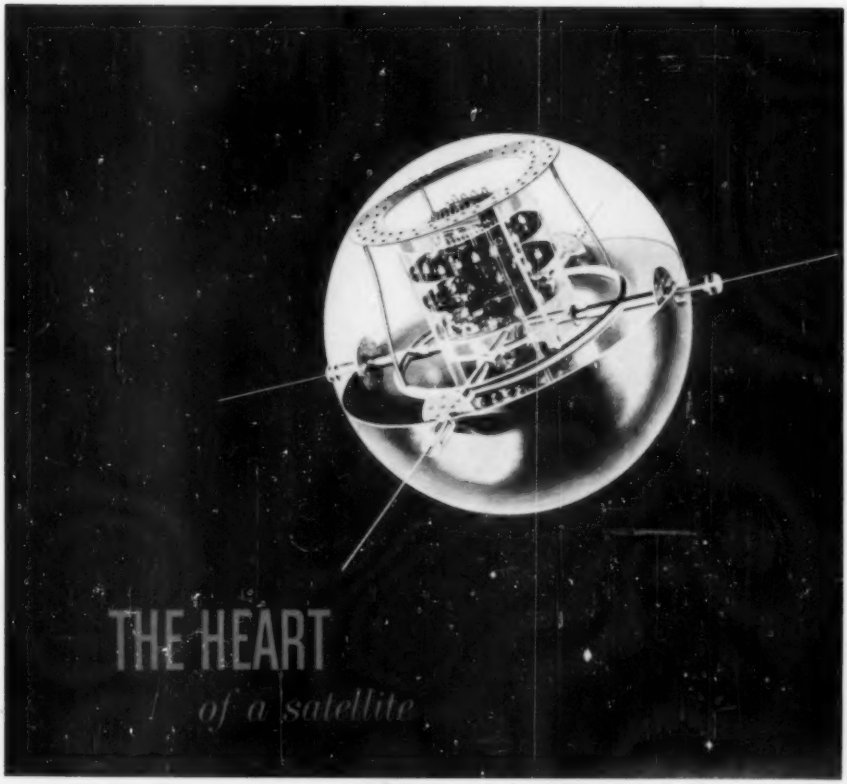
Poor Joshua is long past doing any great harm, but it is perhaps worth setting his record straight. We can do so readily by calling on the late William Chauncy Langdon, who was the first historical librarian of the A. T. & T. Company. Writing in the BELL TELEPHONE QUARTERLY – our own predecessor – for April 1933, Mr. Langdon exposed the Coppersmith hoax in incontrovertible terms:

"Among the best authenticated instances of telephone myths stands the pathetic figure of Joshua Coppersmith. Joshua had a clever father, whoever he was. The son is plausible in form, and he still wanders up and down the land, doing odd jobs filling space in worthy periodicals. Like other famous characters, his birthplace is variously credited,– to New York, to Boston, to 'somewhere in the East.' There is reason, it may be stated, to add to the list an enterprising town in the Middle West. Naturally no one of his editorial sponsors has thus far been able to cite for verification the name of the newspaper and the date on which the news of Joshua Coppersmith was first printed, but this it may be unreasonable to ask.

"Whenever it was, the story goes that:

" 'A man about 46 years of age, giving the name of Joshua Coppersmith, has been arrested in New York for attempting to extort funds from ignorant and superstitious people by exhibiting a device which he says will convey the human voice any distance over metallic wires so that it will be heard by a listener at the other end. He calls the instrument a "telephone" which is obviously intended to imitate the word "telegraph" and win the confidence of those who know of the success of the latter instrument without understanding the principles upon which it is based. Well informed people know that it is impossible to transmit the human voice over wires as may be done with the dots and dashes and signals of the Morse Code, and that, were it possible to do so, the thing would be of no practical benefit. The authorities who apprehended this criminal are to be congratulated, and it is hoped that his punishment will be prompt and fitting that it may serve as an example to a horde of other conscienceless schemers who enrich themselves at the expense of their fellow creatures.'

"There are a number of little slips in this story to arouse suspicion. The offense charged is extortion, rather than swindling. But the man is said to have exhibited the device. Why then would not a simple demonstration have either confirmed the charge or justified the defendant? But the appeal is rather to the indefinite 'well-informed.' On analysis, as often proves to be the case, the real implication is against the Press and the Courts, the one for apprehending and the other for demanding long imprisonment on a charge that any way you take it will not hold water. But alas, newspapers and periodicals still amuse themselves by harrassing the poor man, now long past a hundred years old, although there never was any such man. In all fairness and kindness old Joshua's ghost should be allowed to rest in peace."



Two Bell Laboratories inventions, the Transistor and the Bell Solar Battery, are important elements of the Vanguard satellite.

AN astonishing amount of equipment can be packed into an artificial earth satellite. There are devices to measure the temperatures of outer space, for example, and determine meteorite density, or cosmic ray activity.

Then there are also two small but powerful radios equipped with transistors—the tiny amplifiers invented at Bell Telephone Laboratories—and batteries to power them.

In the Vanguard satellite, shown in the picture above, all of this equipment is in the cylindrical core in the center.

Miniaturization—still a new word—is the reason why small satellites can do big jobs. Hundreds of pounds of equipment have been reduced in size, or "miniaturized," so that they weigh only a few pounds, and take up little room.

THE transistor is a good example of this. About the size of a lima bean, it can do the job of a vacuum tube fifty times larger. It needs so little power that very small batteries can be used. And it's rugged and durable.

The qualities that make the use of transistors imperative in satellites are also used to advantage in more and more new telephone equipment. For example, transistors now help millions of telephone customers to dial their own long distance calls directly. And those who are hard of hearing can order transistor-equipped telephones with adjustable volume control.

SMALL as it is, the transistor has already won a big place for itself, and has an even bigger future . . . in the heart of many a satellite yet to orbit, and in the heart of tomorrow's better telephone service. Thus Bell System science finds new ways to new worlds of communication.

BELL TELEPHONE SYSTEM

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